RELAZIONE GEOTECNICA

ALLEGATO B – CALCOLI DI VERIFICA DEI PALI DI FONDAZIONE

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1 Calcolo del carico limite verticale dei pali

Così come richiamato al Paragrafo 5.1.3 della Relazione geotecnica, il carico limite verticale dei pali è stato calcolato in accordo con le prescrizioni al Paragrafo 6.4.3.1.1 delle Norme Tecniche per le Costruzioni (NTC2028) "Resistenze di pali soggetti a carichi assiali". I pali di fondazione previsti in progetto hanno tutti lunghezza 15m con diametro pari a:

- 0,80m
- 1,00m
- 1,20m

Il valore di progetto R_d della resistenza si ottiene a partire dal valore caratteristico R_k applicando i coefficienti parziali γ_R della Tab. 6.4.II delle NTC riportata di seguito.

Tabella 1-1 Coefficienti parziali γ_R da applicare alle resistenze caratteristiche a carico verticale dei pali (Tab. 6.4.II delle NTC).

Resistenza	Simbolo	Pali infissi	Pali trivellati	Pali ad elica continua
	γ_R	(R3)	(R3)	(R3)
Base	γ_b	1,15	1,35	1,3
Laterale in compressione	γ_s	1,15	1,15	1,15
Totale (*)	γ	1,15	1,30	1,25
Laterale in trazione	γ_{st}	1,25	1,25	1,25

(*) da applicare alle resistenze caratteristiche dedotte dai risultati di prove di carico di progetto.

Essendo il carico limite dei pali calcolato con riferimento a procedure analitiche che prevedono l'utilizzo dei parametri geotecnici o dei risultati di prove in sito, il valore caratteristico della resistenza a compressione $R_{c,k}$ (o a trazione $R_{t,k}$) è dato dal minore dei valori ottenuti applicando al valore medio e al valore minimo delle resistenze calcolate $R_{c,cal}$ ($R_{t,cal}$) i fattori di correlazione ξ riportati nella Tab. 6.4.IV delle NTC (tab. 1-2 della presente relazione), in funzione del numero n di verticali di indagine:

$$R_{c,k} = Min\left\{\frac{(R_{c,cal})_{media}}{\xi_3}; \frac{(R_{c,cal})_{min}}{\xi_4}\right\} \qquad [5.7]$$

$$R_{t,k} = Min\left\{\frac{(R_{t,cal})_{media}}{\xi_3}; \frac{(R_{t,cal})_{min}}{\xi_4}\right\} \qquad [5.8]$$

Tabella 1-2 Fattori di correlazione ξ per la determinazione della resistenza caratteristica in funzione del numero di verticali indagate (Tab. 6.4.IV delle NTC)

Numero di verticali indagate	1	2	3	4	5	7	≥ 10
ξ_3	1,70	1,65	1,60	1,55	1,50	1,45	1,40
ξ_4	1,70	1,55	1,48	1,42	1,34	1,28	1,21

In Tabella 1-3 e Tabella 1-4 si riportano rispettivamente i valori calcolati del carico limite verticale a compressione e sfilamento per le tre condizioni:

- statica di breve termine
- statica di lungo termine
- sismica (breve termine).

Così come prescritto dalle NTC, i valori del carico limite sono stati calcolati per le 6 verticali d'indagine: CPTu8, CPTu4, CPT1_2012, CPTu1, CPTu3 e CPTu2bis che sono state protratte sino ad una profondità tale da investigare il volume significativo di terreno interessato dall'interazione con i pali in progetto.
Si precisa che la verifica in condizioni sismiche è stata eseguita assumendo che gli strati sabbiosi risultati liquefacibili dalla specifica analisi riportata al Capitolo 4 della relazione geotecnica non contribuiscano alla resistenza dei pali (ponendo angolo d'attrito φ=0).
I valori del carico limite verticale di progetto, calcolati come precedentemente illustrato, sono riportati in grassetto nell'ultima colonna della Tabella 1-3 e della Tabella 1-4. Gli output di calcolo sono riportati nei paragrafi seguenti.

Tabella 1-3 Valori del carico limite calcolati per sollecitazione di compressione nella condizione sismica, statica di breve termine e statica di lungo termine.

COMPRESSIONE									
SISMICA									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	5333	3504	7558	7308	5362	7410	6079	3504	**2675**
1.0	3804	2631	5412	5193	3828	5276	4357	2631	**2008**
0.8	2549	1882	3641	3458	2568	3524	2937	1882	**1437**
STATICA - BREVE TERMINE									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	6897	6883	7709	7812	6945	7753	7333	6883	**4972**
1.0	4951	4971	5538	5613	4990	5563	5271	4951	**3573**
0.8	3344	3386	3742	3794	3376	3753	3566	3344	**2417**
STATICA - LUNGO TERMINE									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	6832	6693	7550	7730	6861	7683	7225	6693	**4898**
1.0	4896	4813	5405	5544	4921	5504	5180	4813	**3512**
0.8	3300	3259	3636	3739	3320	3706	3493	3259	**2368**

Tabella 1-4 Valori del carico limite calcolati per una sollecitazione di trazione nella condizione sismica, statica di breve termine e statica di lungo termine.

SFILAMENTO									
SISMICA									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	1449	1912	1980	1685	1475	1771	1712	1449	**1106**
1.0	1149	1534	1592	1345	1171	1417	1368	1149	**877**
0.8	872	1180	1226	1029	889	1086	1047	872	**666**
STATICA - BREVE TERMINE									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	1929	2115	2120	2149	1973	2087	2062	1929	**1398**
1.0	1549	1703	1707	1732	1585	1680	1659	1549	**1125**
0.8	1192	1316	1319	1338	1221	1297	1280	1192	**868**
STATICA - LUNGO TERMINE									
d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	**R_d (kN)**
1.2	1869	1939	1973	2073	1896	2022	1962	1869	**1330**
1.0	1499	1557	1585	1668	1521	1626	1576	1499	**1069**
0.8	1152	1199	1221	1288	1170	1254	1214	1152	**823**

1.1 Calcolo per sollecitazioni di compressione

1.1.1 Calcolo del carico limite con riferimento alla prova CPTu8

1.1.1.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.4	19.35	34		0.70	0.50	0.67
2	2.4	4.4	19.35	34		0.70	0.50	0.67
3	4.4	5.2	18.33	22	25	0.70	0.50	0.40
4	5.2	5.9	19.35	35		0.70	0.50	0.70
5	5.9	9.8	18.33	22	30	0.66	0.50	0.40
6	9.8	10.6	19.35	34		0.70	0.50	0.67
7	10.6	11.6	18.33	22	50	0.50	0.50	0.40
8	11.6	11.8	19.35	36		0.70	0.50	0.73
9	11.8	13.4	19.35	41		0.70	0.50	0.86
10	13.4	14.5	19.35	36		0.70	0.50	0.73
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35	36		0.70	0.50	0.73
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35	36		0.70	0.50	0.73
15	26.0	27.9	18.33	22	175	0.35	0.50	0.40

1.1.1.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	6897	6832

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	2.8	10.07	3.79	655.09	740.89	626.85	10.07	3.79	655.09	740.89	626.85
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	5.7	10.39	7.71	676.03	764.58	643.37	10.39	7.71	676.03	764.58	643.37
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	8.5	10.71	11.75	696.97	788.26	659.96	10.71	11.75	696.97	788.26	659.96
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	11.3	11.03	15.91	717.91	811.94	676.62	11.03	15.91	717.91	811.94	676.62
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	14.1	11.27	20.15	721.32	815.79	693.31	11.27	20.15	721.32	815.79	693.31
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	17.0	11.59	24.52	741.76	838.91	711.41	11.59	24.52	741.76	838.91	711.41
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	19.8	11.91	29.01	762.20	862.03	729.61	11.91	29.01	762.20	862.03	729.61
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	22.6	12.22	33.62	782.65	885.15	747.92	12.22	33.62	782.65	885.15	747.92
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	25.4	12.54	38.35	803.09	908.28	766.33	12.54	38.35	803.09	908.28	766.33
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	28.3	12.86	43.20	823.54	931.40	784.85	12.86	43.20	823.54	931.40	784.85
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	31.1	13.18	48.17	843.98	954.52	803.47	13.18	48.17	843.98	954.52	803.47
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	33.9	13.50	53.26	864.42	977.64	822.19	13.50	53.26	864.42	977.64	822.19
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	36.8	13.82	58.47	884.87	1000.76	841.02	13.82	58.47	884.87	1000.76	841.02
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	39.6	14.14	63.80	905.31	1023.88	859.96	14.14	63.80	905.31	1023.88	859.96
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	42.4	14.46	69.25	925.75	1047.00	816.68	14.46	69.25	925.75	1047.00	807.22
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	45.2	14.78	74.82	946.20	1070.13	772.09	14.78	74.82	946.20	1070.13	753.27
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	48.1	15.10	80.51	966.64	1093.25	726.19	15.10	80.51	966.64	1093.25	698.09
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	50.9	15.42	86.32	987.09	1116.37	678.98	15.42	86.32	987.09	1116.37	641.69
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	53.7	15.74	92.26	1007.53	1139.49	630.45	15.74	92.26	1007.53	1139.49	584.08
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	56.5	16.06	98.31	1027.97	1162.61	580.61	16.06	98.31	1027.97	1162.61	525.24
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	59.4	16.38	104.48	1048.42	1185.73	529.46	16.38	104.48	1048.42	1185.73	465.18
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	62.2	16.70	110.78	1068.86	1208.85	477.00	16.70	110.78	1068.86	1208.85	403.90

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	65.0	17.01	117.19	1089.30	1231.97	509.71	17.01	117.19	1089.30	1231.97	436.61
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	67.9	17.33	123.73	1109.75	1255.10	542.75	17.33	123.73	1109.75	1255.10	469.65
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	70.7	17.50	130.32	311.97	352.83	576.08	10.63	127.74	187.77	212.37	500.73
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	73.5	17.50	136.92	313.81	354.91	671.94	10.81	131.81	190.81	215.80	603.86
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	76.3	17.50	143.52	315.64	356.98	769.46	10.98	135.95	193.85	219.24	708.60
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	79.2	17.50	150.12	317.47	359.05	868.61	11.15	140.15	196.89	222.68	814.95
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	82.0	17.50	156.71	319.31	361.13	969.41	11.32	144.42	199.93	226.11	922.91
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	84.8	17.50	163.31	321.14	363.20	977.34	11.49	148.75	202.97	229.55	926.59
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	87.7	17.50	169.91	322.97	365.27	985.27	11.67	153.15	206.01	232.99	930.32
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	90.5	17.50	176.51	324.80	367.34	993.19	11.84	157.61	209.05	236.43	934.12
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	93.3	20.81	184.35	1462.27	1653.79	1002.20	20.81	165.46	1462.27	1653.79	940.85
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	96.1	21.15	192.32	1485.69	1680.28	924.84	21.15	173.43	1485.69	1680.28	852.48
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	99.0	21.48	200.42	1509.11	1706.77	845.93	21.48	181.53	1509.11	1706.77	762.67
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	101.8	21.81	208.64	1532.54	1733.26	765.50	21.81	189.75	1532.54	1733.26	671.42
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	104.6	22.15	216.99	1555.96	1759.75	683.52	22.15	198.10	1555.96	1759.75	578.72
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	107.4	22.48	225.47	1579.38	1786.24	600.01	22.48	206.57	1579.38	1786.24	484.58
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	110.3	22.81	234.07	1602.81	1812.73	514.97	22.81	215.17	1602.81	1812.73	388.99
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	241.53	385.18	435.63	427.30	13.36	220.21	235.91	266.81	288.76
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	249.00	387.02	437.70	432.50	13.53	225.31	238.95	270.24	292.91
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	256.46	388.85	439.78	437.70	13.70	230.48	241.99	273.68	297.12
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	263.92	390.68	441.85	442.89	13.88	235.71	245.03	277.12	301.39
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	271.39	392.51	443.92	448.09	14.05	241.01	248.07	280.56	305.71
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	278.85	394.35	446.00	453.29	14.22	246.37	251.10	283.99	310.09
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	286.32	396.18	448.07	458.49	14.39	251.79	254.14	287.43	314.53
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	293.78	398.01	450.14	463.69	14.56	257.28	257.18	290.87	319.02
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	301.25	399.85	452.22	468.89	14.74	262.84	260.22	294.30	323.57
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	308.71	401.68	454.29	474.09	14.91	268.46	263.26	297.74	328.18
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	316.18	403.51	456.36	479.29	15.08	274.14	266.30	301.18	332.84
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	323.64	405.35	458.43	484.49	15.25	279.89	269.34	304.62	337.56
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	331.10	407.18	460.51	489.68	15.42	285.71	272.38	308.05	342.34
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	338.57	409.01	462.58	494.88	15.60	291.59	275.42	311.49	347.17
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	346.03	410.84	464.65	500.08	15.77	297.53	278.46	314.93	352.06
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	353.50	412.68	466.73	505.28	15.94	303.54	281.50	318.37	357.00
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	360.96	414.51	468.80	510.48	16.11	309.62	284.54	321.80	362.00
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	368.43	416.34	470.87	515.68	16.29	315.76	287.58	325.24	367.06
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	375.89	418.18	472.95	520.88	16.46	321.96	290.62	328.68	372.17
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	383.36	420.01	475.02	526.08	16.63	328.23	293.65	332.12	377.34
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	390.82	421.84	477.09	531.28	16.80	334.57	296.69	335.55	382.57
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	398.28	423.68	479.17	536.48	16.97	340.96	299.73	338.99	387.85
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	405.75	425.51	481.24	541.67	17.15	347.43	302.77	342.43	393.19
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	413.21	427.34	483.31	546.87	17.32	353.96	305.81	345.86	398.59
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	420.68	429.17	485.38	552.07	17.49	360.55	308.85	349.30	404.04
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	428.14	431.01	487.46	557.27	17.66	367.21	311.89	352.74	409.55
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	435.61	432.84	489.53	562.47	17.83	373.93	314.93	356.18	415.11
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	443.07	434.67	491.60	567.67	18.01	380.72	317.97	359.61	420.74
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	450.54	436.51	493.68	572.87	18.18	387.57	321.01	363.05	426.41
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	458.00	438.34	495.75	705.62	18.35	394.49	324.05	366.49	567.48

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	465.46	440.17	497.82	839.78	18.52	401.48	327.09	369.93	709.93
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	472.93	442.01	499.90	975.36	18.70	408.52	330.13	373.36	853.77
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	480.39	443.84	501.97	1112.36	18.87	415.64	333.17	376.80	998.98
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	487.86	445.67	504.04	1250.78	19.04	422.81	336.20	380.24	1145.58
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	495.32	447.50	506.12	1390.62	19.21	430.06	339.24	383.68	1293.56
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	502.79	449.34	508.19	1531.87	19.38	437.36	342.28	387.11	1442.92
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	510.25	451.17	510.26	1674.54	19.56	444.74	345.32	390.55	1593.66
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	517.71	453.00	512.33	1693.51	19.73	452.17	348.36	393.99	1600.07
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	220.5	19.80	525.18	454.84	514.41	1712.48	19.90	459.68	351.40	397.43	1606.53
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	223.4	33.29	537.73	2131.42	2410.58	1735.87	33.29	472.23	2131.42	2410.58	1617.39
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	226.2	33.61	550.40	2151.87	2433.70	1631.82	33.61	484.90	2151.87	2433.70	1493.01
10.1	8.1	6	0.70	0.50	0.67	30.80	21.43	229.0	33.93	563.19	2172.31	2456.82	1526.46	33.93	497.69	2172.31	2456.82	1367.41
10.2	8.2	6	0.70	0.50	0.67	30.80	21.43	231.8	34.25	576.10	2192.75	2479.95	1419.78	34.25	510.60	2192.75	2479.95	1240.60
10.3	8.3	6	0.70	0.50	0.67	30.80	21.43	234.7	34.57	589.14	2213.20	2503.07	1311.79	34.57	523.63	2213.20	2503.07	1112.56
10.4	8.4	6	0.70	0.50	0.67	30.80	21.43	237.5	34.89	602.29	2233.64	2526.19	1202.49	34.89	536.79	2233.64	2526.19	983.30
10.5	8.5	6	0.70	0.50	0.67	30.80	21.43	240.3	35.21	615.56	2254.08	2549.31	1091.87	35.21	550.06	2254.08	2549.31	852.82
10.6	8.6	6	0.70	0.50	0.67	30.80	21.43	243.2	35.53	628.96	2274.53	2572.43	979.94	35.53	563.45	2274.53	2572.43	721.12
10.7	8.7	7	0.50	0.50	0.40	19.00	3.57	246.0	25.00	638.38	652.15	737.56	1058.50	21.61	571.60	381.67	431.65	798.56
10.8	8.8	7	0.50	0.50	0.40	19.00	3.57	248.8	25.00	647.81	653.98	739.64	1262.54	21.79	579.81	384.70	435.09	1022.15
10.9	8.9	7	0.50	0.50	0.40	19.00	3.57	251.6	25.00	657.23	655.82	741.71	1623.81	21.96	588.09	387.74	438.53	1402.94
11.0	9.0	7	0.50	0.50	0.40	19.00	3.57	254.5	25.00	666.66	657.65	743.78	1988.09	22.13	596.44	390.78	441.97	1786.69
11.1	9.1	7	0.50	0.50	0.40	19.00	3.57	257.3	25.00	676.08	659.48	745.86	2355.36	22.30	604.84	393.82	445.40	2173.40
11.2	9.2	7	0.50	0.50	0.40	19.00	3.57	260.1	25.00	685.51	661.31	747.93	2725.63	22.47	613.32	396.86	448.84	2563.07
11.3	9.3	7	0.50	0.50	0.40	19.00	3.57	263.0	25.00	694.93	663.15	750.00	3098.88	22.65	621.85	399.90	452.28	2955.70
11.4	9.4	7	0.50	0.50	0.40	19.00	3.57	265.8	25.00	704.35	664.98	752.07	3475.13	22.82	630.46	402.94	455.71	3351.27
11.5	9.5	7	0.50	0.50	0.40	19.00	3.57	268.6	25.00	713.78	666.81	754.15	3854.36	22.99	639.12	405.98	459.15	3749.80
11.6	9.6	7	0.50	0.50	0.40	19.00	3.57	271.4	25.00	723.20	668.65	756.22	4236.57	23.16	647.85	409.02	462.59	4151.28
11.7	9.7	8	0.70	0.50	0.73	33.10	27.98	274.3	42.15	739.10	3235.45	3659.21	4627.38	42.15	663.75	3235.45	3659.21	4561.86
11.8	9.8	8	0.70	0.50	0.73	33.10	27.97	277.1	42.50	755.12	3260.82	3687.90	4825.94	42.50	679.77	3260.82	3687.90	4760.41
11.9	9.9	9	0.70	0.50	0.86	37.70	45.33	279.9	50.54	774.17	5327.12	6024.83	5028.30	50.54	698.82	5327.12	6024.83	4962.78
12.0	10.0	9	0.70	0.50	0.86	37.70	45.31	282.7	50.95	793.38	5368.36	6071.47	5076.54	50.95	718.03	5368.36	6071.47	5011.02
12.1	10.1	9	0.70	0.50	0.86	37.70	45.29	285.6	51.36	812.74	5409.55	6118.06	5124.88	51.36	737.40	5409.55	6118.06	5059.36
12.2	10.2	9	0.70	0.50	0.86	37.70	45.28	288.4	51.77	832.26	5450.70	6164.60	5173.31	51.77	756.91	5450.70	6164.60	5107.79
12.3	10.3	9	0.70	0.50	0.86	37.70	45.26	291.2	52.18	851.94	5491.81	6211.09	5221.85	52.18	776.59	5491.81	6211.09	5156.33
12.4	10.4	9	0.70	0.50	0.86	37.70	45.24	294.1	52.59	871.76	5532.87	6257.53	5270.48	52.59	796.41	5532.87	6257.53	5204.95
12.5	10.5	9	0.70	0.50	0.86	37.70	45.23	296.9	53.00	891.74	5573.89	6303.92	5144.49	53.00	816.40	5573.89	6303.92	5078.97
12.6	10.6	9	0.70	0.50	0.86	37.70	45.21	299.7	53.41	911.88	5614.87	6350.27	5017.42	53.41	836.53	5614.87	6350.27	4951.89
12.7	10.7	9	0.70	0.50	0.86	37.70	45.19	302.5	53.82	932.17	5655.80	6396.56	4889.24	53.82	856.82	5655.80	6396.56	4823.72
12.8	10.8	9	0.70	0.50	0.86	37.70	45.17	305.4	54.23	952.62	5696.69	6442.80	4759.97	54.23	877.27	5696.69	6442.80	4694.45
12.9	10.9	9	0.70	0.50	0.86	37.70	45.16	308.2	54.65	973.22	5737.53	6488.99	4629.60	54.65	897.87	5737.53	6488.99	4564.08
13.0	11.0	9	0.70	0.50	0.86	37.70	45.14	311.0	55.06	993.98	5778.33	6535.14	4498.14	55.06	918.63	5778.33	6535.14	4432.62
13.1	11.1	9	0.70	0.50	0.86	37.70	45.12	313.8	55.47	1014.89	5819.08	6581.23	4365.59	55.47	939.54	5819.08	6581.23	4300.07
13.2	11.2	9	0.70	0.50	0.86	37.70	45.10	316.7	55.88	1035.95	5859.79	6627.26	4231.95	55.88	960.60	5859.79	6627.26	4166.43
13.3	11.3	9	0.70	0.50	0.86	37.70	45.08	319.5	56.29	1057.17	5900.45	6673.25	4097.21	56.29	981.82	5900.45	6673.25	4031.69
13.4	11.4	9	0.70	0.50	0.86	37.70	45.07	322.3	56.70	1078.54	5941.06	6719.19	3961.39	56.70	1003.19	5941.06	6719.19	3895.87
13.5	11.5	10	0.70	0.50	0.73	33.10	27.77	325.2	48.41	1096.80	3687.68	4170.67	3821.63	48.41	1021.45	3687.68	4170.67	3756.11
13.6	11.6	10	0.70	0.50	0.73	33.10	27.76	328.0	48.76	1115.18	3712.52	4198.76	4043.24	48.76	1039.83	3712.52	4198.76	3977.72

13.7	11.7	10	0.70	0.50	0.73	33.10	27.75	330.8	49.11	1133.69	3737.33	4226.82	4266.12	49.11	1058.34	3737.33	4226.82	4200.60
13.8	11.8	10	0.70	0.50	0.73	33.10	27.73	333.6	49.46	1152.34	3762.11	4254.85	4490.27	49.46	1076.99	3762.11	4254.85	4424.75
13.9	11.9	10	0.70	0.50	0.73	33.10	27.72	336.5	49.81	1171.11	3786.86	4282.84	4715.68	49.81	1095.77	3786.86	4282.84	4650.16
14.0	12.0	10	0.70	0.50	0.73	33.10	27.71	339.3	50.15	1190.02	3811.58	4310.79	4942.35	50.15	1114.67	3811.58	4310.79	4876.83
14.1	12.1	10	0.70	0.50	0.73	33.10	27.70	342.1	50.50	1209.06	3836.26	4338.71	5170.29	50.50	1133.71	3836.26	4338.71	5104.77
14.2	12.2	10	0.70	0.50	0.73	33.10	27.68	344.9	50.85	1228.23	3860.92	4366.60	5399.48	50.85	1152.88	3860.92	4366.60	5333.96
14.3	12.3	10	0.70	0.50	0.73	33.10	27.67	347.8	51.20	1247.53	3885.54	4394.44	5629.94	51.20	1172.18	3885.54	4394.44	5564.42
14.4	12.4	10	0.70	0.50	0.73	33.10	27.66	350.6	51.55	1266.96	3910.13	4422.25	5861.65	51.55	1191.61	3910.13	4422.25	5796.13
14.5	12.5	10	0.70	0.50	0.73	33.10	27.65	353.4	51.89	1286.53	3934.69	4450.03	6094.62	51.89	1211.18	3934.69	4450.03	6029.10
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	1309.76	6424.74	7266.21	6331.92	61.62	1234.41	6424.74	7266.21	6266.40
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	1333.14	6464.73	7311.44	6382.71	62.03	1257.79	6464.73	7311.44	6317.19
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	1356.68	6504.67	7356.61	6433.60	62.44	1281.33	6504.67	7356.61	6368.08
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	1380.38	6544.56	7401.73	6484.58	62.85	1305.03	6544.56	7401.73	6419.06
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1404.22	6584.40	7446.78	6535.65	63.26	1328.88	6584.40	7446.78	6470.13
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1428.23	6624.19	7491.78	6586.81	63.67	1352.88	6624.19	7491.78	6521.29
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1452.39	6663.93	7536.72	6638.06	64.08	1377.04	6663.93	7536.72	6572.54
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1476.70	6703.61	7581.61	6481.75	64.49	1401.35	6703.61	7581.61	6416.22
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1501.17	6743.25	7626.43	6324.37	64.90	1425.82	6743.25	7626.43	6258.85
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1525.79	6782.83	7671.20	6165.92	65.31	1450.44	6782.83	7671.20	6100.40
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1550.57	6822.36	7715.90	6006.41	65.72	1475.22	6822.36	7715.90	5940.89
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1575.50	6861.83	7760.55	5845.84	66.13	1500.15	6861.83	7760.55	5780.32
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1600.58	6901.26	7805.14	5684.21	66.54	1525.24	6901.26	7805.14	5618.69
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1625.83	6940.63	7849.66	5521.51	66.95	1550.48	6940.63	7849.66	5455.99
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1651.22	6979.94	7894.13	5357.76	67.36	1575.87	6979.94	7894.13	5292.24
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1676.77	7019.21	7938.54	5192.95	67.77	1601.42	7019.21	7938.54	5127.43
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1702.48	7058.42	7982.88	5027.08	68.18	1627.13	7058.42	7982.88	4961.56
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.15	1724.40	4371.03	4943.52	5075.89	58.15	1649.05	4371.03	4943.52	5010.37
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.50	1746.45	4394.94	4970.56	5332.41	58.50	1671.11	4394.94	4970.56	5266.89
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	58.85	1768.64	4418.82	4997.57	5590.16	58.85	1693.29	4418.82	4997.57	5524.64
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.20	1790.96	4442.66	5024.53	5849.13	59.20	1715.61	4442.66	5024.53	5783.61
16.7	14.7	12	0.70	0.50	0.73	33.10	27.35	415.6	59.55	1813.41	4466.47	5051.46	6109.32	59.55	1738.06	4466.47	5051.46	6043.80
16.8	14.8	12	0.70	0.50	0.73	33.10	27.33	418.5	59.89	1835.98	4490.24	5078.34	6370.73	59.89	1760.64	4490.24	5078.34	6305.21
16.9	14.9	12	0.70	0.50	0.73	33.10	27.32	421.3	60.24	1858.69	4513.97	5105.18	6633.36	60.24	1783.35	4513.97	5105.18	6567.84
17.0	15.0	12	0.70	0.50	0.73	33.10	27.31	424.1	60.59	1881.54	4537.67	5131.98	6897.20	60.59	1806.19	4537.67	5131.98	6831.68

1.1.1.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	4951	4896

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	2.0	10.07	3.16	655.09	514.51	435.77	10.07	3.16	655.09	514.51	435.77
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	3.9	10.39	6.43	676.03	530.96	447.72	10.39	6.43	676.03	530.96	447.72
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	5.9	10.71	9.79	696.97	547.40	459.72	10.71	9.79	696.97	547.40	459.72
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	7.9	11.03	13.25	717.91	563.85	471.79	11.03	13.25	717.91	563.85	471.79
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	9.8	11.27	16.79	721.32	566.52	483.90	11.27	16.79	721.32	566.52	483.90
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	11.8	11.59	20.43	741.76	582.58	497.00	11.59	20.43	741.76	582.58	497.00
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	13.7	11.91	24.17	762.20	598.63	510.18	11.91	24.17	762.20	598.63	510.18
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	15.7	12.22	28.01	782.65	614.69	523.45	12.22	28.01	782.65	614.69	523.45
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	17.7	12.54	31.96	803.09	630.75	536.80	12.54	31.96	803.09	630.75	536.80
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	19.6	12.86	36.00	823.54	646.80	550.25	12.86	36.00	823.54	646.80	550.25
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	21.6	13.18	40.14	843.98	662.86	563.78	13.18	40.14	843.98	662.86	563.78
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	23.6	13.50	44.38	864.42	678.92	577.40	13.50	44.38	864.42	678.92	577.40
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	25.5	13.82	48.72	884.87	694.97	591.10	13.82	48.72	884.87	694.97	591.10
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	27.5	14.14	53.16	905.31	711.03	604.90	14.14	53.16	905.31	711.03	604.90
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	29.5	14.46	57.71	925.75	727.09	575.50	14.46	57.71	925.75	727.09	568.93
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	31.4	14.78	62.35	946.20	743.14	545.21	14.78	62.35	946.20	743.14	532.14
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	33.4	15.10	67.09	966.64	759.20	514.02	15.10	67.09	966.64	759.20	494.51
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	35.3	15.42	71.94	987.09	775.26	481.94	15.42	71.94	987.09	775.26	456.05
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	37.3	15.74	76.88	1007.53	791.31	448.96	15.74	76.88	1007.53	791.31	416.75
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	39.3	16.06	81.93	1027.97	807.37	415.08	16.06	81.93	1027.97	807.37	376.62
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	41.2	16.38	87.07	1048.42	823.43	380.30	16.38	87.07	1048.42	823.43	335.66
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	43.2	16.70	92.31	1068.86	839.48	344.63	16.70	92.31	1068.86	839.48	293.86

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	45.2	17.01	97.66	1089.30	855.54	368.12	17.01	97.66	1089.30	855.54	317.35
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	47.1	17.33	103.11	1109.75	871.59	391.85	17.33	103.11	1109.75	871.59	341.09
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	49.1	17.50	108.60	311.97	245.02	415.79	10.63	106.45	187.77	147.48	363.15
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	51.1	17.50	114.10	313.81	246.46	483.16	10.81	109.84	190.81	149.86	435.26
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	53.0	17.50	119.60	315.64	247.90	551.68	10.98	113.29	193.85	152.25	508.50
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	55.0	17.50	125.10	317.47	249.34	621.33	11.15	116.79	196.89	154.64	582.86
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	56.9	17.50	130.59	319.31	250.78	692.13	11.32	120.35	199.93	157.02	658.35
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	58.9	17.50	136.09	321.14	252.22	698.43	11.49	123.96	202.97	159.41	661.43
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	60.9	17.50	141.59	322.97	253.66	704.73	11.67	127.63	206.01	161.80	664.55
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	62.8	17.50	147.09	324.80	255.10	711.03	11.84	131.34	209.05	164.19	667.73
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	64.8	20.81	153.63	1462.27	1148.46	718.24	20.81	137.88	1462.27	1148.46	673.35
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	66.8	21.15	160.27	1485.69	1166.86	665.48	21.15	144.53	1485.69	1166.86	612.95
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	68.7	21.48	167.02	1509.11	1185.26	611.66	21.48	151.27	1509.11	1185.26	551.56
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	70.7	21.81	173.87	1532.54	1203.65	556.79	21.81	158.13	1532.54	1203.65	489.18
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	72.6	22.15	180.83	1555.96	1222.05	500.88	22.15	165.08	1555.96	1222.05	425.81
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	74.6	22.48	187.89	1579.38	1240.45	443.91	22.48	172.15	1579.38	1240.45	361.46
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	76.6	22.81	195.06	1602.81	1258.84	385.89	22.81	179.31	1602.81	1258.84	296.12
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	201.28	385.18	302.52	325.90	13.36	183.51	235.91	185.28	227.12
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	207.50	387.02	303.96	330.42	13.53	187.76	238.95	187.67	230.62
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	213.72	388.85	305.40	334.93	13.70	192.07	241.99	190.06	234.17
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	219.94	390.68	306.84	339.44	13.88	196.42	245.03	192.44	237.77
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	226.16	392.51	308.28	343.95	14.05	200.84	248.07	194.83	241.41
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	232.38	394.35	309.72	348.46	14.22	205.31	251.10	197.22	245.10
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	238.60	396.18	311.16	352.98	14.39	209.83	254.14	199.60	248.83
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	244.82	398.01	312.60	357.49	14.56	214.40	257.18	201.99	252.62
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	251.04	399.85	314.04	362.00	14.74	219.03	260.22	204.38	256.45
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	257.26	401.68	315.48	366.51	14.91	223.72	263.26	206.77	260.32
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	263.48	403.51	316.92	371.02	15.08	228.45	266.30	209.15	264.25
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	269.70	405.35	318.36	375.54	15.25	233.25	269.34	211.54	268.22
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	275.92	407.18	319.80	380.05	15.42	238.09	272.38	213.93	272.24
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	282.14	409.01	321.24	384.56	15.60	242.99	275.42	216.31	276.30
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	288.36	410.84	322.68	389.07	15.77	247.95	278.46	218.70	280.42
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	294.58	412.68	324.12	393.58	15.94	252.95	281.50	221.09	284.58
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	300.80	414.51	325.56	398.10	16.11	258.02	284.54	223.47	288.78
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	307.02	416.34	327.00	402.61	16.29	263.13	287.58	225.86	293.04
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	313.24	418.18	328.43	407.12	16.46	268.30	290.62	228.25	297.34
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	319.46	420.01	329.87	411.63	16.63	273.53	293.65	230.64	301.69
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	325.68	421.84	331.31	416.14	16.80	278.80	296.69	233.02	306.08
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	331.90	423.68	332.75	420.65	16.97	284.14	299.73	235.41	310.52
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	338.12	425.51	334.19	425.17	17.15	289.52	302.77	237.80	315.01
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	344.34	427.34	335.63	429.68	17.32	294.96	305.81	240.18	319.55
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	350.56	429.17	337.07	434.19	17.49	300.46	308.85	242.57	324.13
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	356.78	431.01	338.51	438.70	17.66	306.01	311.89	244.96	328.76
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	363.01	432.84	339.95	443.21	17.83	311.61	314.93	247.35	333.43
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	369.23	434.67	341.39	447.73	18.01	317.27	317.97	249.73	338.16
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	375.45	436.51	342.83	452.24	18.18	322.98	321.01	252.12	342.93
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	381.67	438.34	344.27	545.33	18.35	328.74	324.05	254.51	441.73

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	387.89	440.17	345.71	639.40	18.52	334.56	327.09	256.89	541.50
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	394.11	442.01	347.15	734.39	18.70	340.44	330.13	259.28	642.17
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	400.33	443.84	348.59	830.32	18.87	346.36	333.17	261.67	743.76
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	406.55	445.67	350.03	927.16	19.04	352.35	336.20	264.05	846.25
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	412.77	447.50	351.47	1024.93	19.21	358.38	339.24	266.44	949.64
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	418.99	449.34	352.91	1123.61	19.38	364.47	342.28	268.83	1053.94
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	425.21	451.17	354.35	1223.21	19.56	370.61	345.32	271.22	1159.14
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	431.43	453.00	355.79	1237.29	19.73	376.81	348.36	273.60	1164.39
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	153.2	19.80	437.65	454.84	357.23	1251.36	19.90	383.06	351.40	275.99	1169.67
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	155.1	33.29	448.11	2131.42	1674.01	1269.12	33.29	393.52	2131.42	1674.01	1178.60
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	157.1	33.61	458.67	2151.87	1690.07	1198.40	33.61	404.08	2151.87	1690.07	1093.61
10.1	8.1	6	0.70	0.50	0.67	30.80	21.42	159.0	33.93	469.33	2171.20	1705.25	1126.77	33.93	414.74	2171.20	1705.25	1007.78
10.2	8.2	6	0.70	0.50	0.67	30.80	21.41	161.0	34.25	480.09	2190.50	1720.42	1054.31	34.25	425.50	2190.50	1720.42	921.15
10.3	8.3	6	0.70	0.50	0.67	30.80	21.40	163.0	34.57	490.95	2209.78	1735.56	981.01	34.57	436.36	2209.78	1735.56	833.74
10.4	8.4	6	0.70	0.50	0.67	30.80	21.39	164.9	34.89	501.91	2229.03	1750.68	906.87	34.89	447.32	2229.03	1750.68	745.54
10.5	8.5	6	0.70	0.50	0.67	30.80	21.37	166.9	35.21	512.97	2248.26	1765.78	831.91	35.21	458.38	2248.26	1765.78	656.55
10.6	8.6	6	0.70	0.50	0.67	30.80	21.36	168.9	35.53	524.13	2267.45	1780.85	756.10	35.53	469.54	2267.45	1780.85	566.77
10.7	8.7	7	0.50	0.50	0.40	19.00	3.55	170.8	25.00	531.98	652.15	512.20	810.76	21.61	476.33	379.83	298.32	620.50
10.8	8.8	7	0.50	0.50	0.40	19.00	3.55	172.8	25.00	539.84	653.98	513.64	952.15	21.79	483.18	382.58	300.48	775.42
10.9	8.9	7	0.50	0.50	0.40	19.00	3.55	174.8	25.00	547.69	655.82	515.08	1201.98	21.96	490.08	385.34	302.64	1038.78
11.0	9.0	7	0.50	0.50	0.40	19.00	3.54	176.7	25.00	555.55	657.65	516.52	1453.85	22.13	497.03	388.08	304.80	1304.17
11.1	9.1	7	0.50	0.50	0.40	19.00	3.54	178.7	25.00	563.40	659.48	517.96	1707.75	22.30	504.04	390.82	306.95	1571.58
11.2	9.2	7	0.50	0.50	0.40	19.00	3.54	180.6	25.00	571.25	661.31	519.39	1963.67	22.47	511.10	393.56	309.10	1841.03
11.3	9.3	7	0.50	0.50	0.40	19.00	3.54	182.6	25.00	579.11	663.15	520.83	2221.62	22.65	518.21	396.29	311.24	2112.49
11.4	9.4	7	0.50	0.50	0.40	19.00	3.53	184.6	25.00	586.96	664.98	522.27	2481.58	22.82	525.38	399.01	313.38	2385.97
11.5	9.5	7	0.50	0.50	0.40	19.00	3.53	186.5	25.00	594.82	666.81	523.71	2743.56	22.99	532.60	401.73	315.52	2661.47
11.6	9.6	7	0.50	0.50	0.40	19.00	3.53	188.5	25.00	602.67	668.65	525.15	3007.56	23.16	539.88	404.45	317.65	2938.98
11.7	9.7	8	0.70	0.50	0.73	33.10	27.75	190.5	42.15	615.91	3208.79	2520.17	3278.25	42.15	553.12	3208.79	2520.17	3223.65
11.8	9.8	8	0.70	0.50	0.73	33.10	27.74	192.4	42.50	629.27	3233.52	2539.60	3416.79	42.50	566.47	3233.52	2539.60	3362.19
11.9	9.9	9	0.70	0.50	0.86	37.70	44.98	194.4	50.54	645.14	5285.79	4151.45	3558.32	50.54	582.35	5285.79	4151.45	3503.72
12.0	10.0	9	0.70	0.50	0.86	37.70	44.95	196.3	50.95	661.15	5326.04	4183.06	3593.52	50.95	598.36	5326.04	4183.06	3538.92
12.1	10.1	9	0.70	0.50	0.86	37.70	44.93	198.3	51.36	677.29	5366.23	4214.63	3628.80	51.36	614.50	5366.23	4214.63	3574.20
12.2	10.2	9	0.70	0.50	0.86	37.70	44.91	200.3	51.77	693.55	5406.36	4246.15	3664.16	51.77	630.76	5406.36	4246.15	3609.55
12.3	10.3	9	0.70	0.50	0.86	37.70	44.89	202.2	52.18	709.95	5446.44	4277.62	3699.59	52.18	647.16	5446.44	4277.62	3644.98
12.4	10.4	9	0.70	0.50	0.86	37.70	44.86	204.2	52.59	726.47	5486.45	4309.05	3735.09	52.59	663.68	5486.45	4309.05	3680.49
12.5	10.5	9	0.70	0.50	0.86	37.70	44.84	206.2	53.00	743.12	5526.41	4340.43	3650.38	53.00	680.33	5526.41	4340.43	3595.78
12.6	10.6	9	0.70	0.50	0.86	37.70	44.82	208.1	53.41	759.90	5566.31	4371.77	3564.94	53.41	697.11	5566.31	4371.77	3510.34
12.7	10.7	9	0.70	0.50	0.86	37.70	44.79	210.1	53.82	776.81	5606.14	4403.05	3478.77	53.82	714.02	5606.14	4403.05	3424.17
12.8	10.8	9	0.70	0.50	0.86	37.70	44.77	212.1	54.23	793.85	5645.91	4434.29	3391.87	54.23	731.06	5645.91	4434.29	3337.27
12.9	10.9	9	0.70	0.50	0.86	37.70	44.75	214.0	54.65	811.02	5685.63	4465.48	3304.24	54.65	748.23	5685.63	4465.48	3249.64
13.0	11.0	9	0.70	0.50	0.86	37.70	44.72	216.0	55.06	828.31	5725.28	4496.62	3215.88	55.06	765.52	5725.28	4496.62	3161.28
13.1	11.1	9	0.70	0.50	0.86	37.70	44.70	217.9	55.47	845.74	5764.87	4527.72	3126.80	55.47	782.95	5764.87	4527.72	3072.20
13.2	11.2	9	0.70	0.50	0.86	37.70	44.68	219.9	55.88	863.29	5804.39	4558.76	3037.00	55.88	800.50	5804.39	4558.76	2982.40
13.3	11.3	9	0.70	0.50	0.86	37.70	44.65	221.9	56.29	880.97	5843.85	4589.75	2946.47	56.29	818.18	5843.85	4589.75	2891.87
13.4	11.4	9	0.70	0.50	0.86	37.70	44.63	223.8	56.70	898.79	5883.25	4620.70	2855.22	56.70	836.00	5883.25	4620.70	2800.62
13.5	11.5	10	0.70	0.50	0.73	33.10	27.47	225.8	48.41	914.00	3648.11	2865.22	2760.87	48.41	851.21	3648.11	2865.22	2706.27
13.6	11.6	10	0.70	0.50	0.73	33.10	27.46	227.8	48.76	929.32	3672.13	2884.08	2915.17	48.76	866.52	3672.13	2884.08	2860.57

13.7	11.7	10	0.70	0.50	0.73	33.10	27.44	229.7	49.11	944.74	3696.11	2902.92	3070.34	49.11	881.95	3696.11	2902.92	3015.74
13.8	11.8	10	0.70	0.50	0.73	33.10	27.42	231.7	49.46	960.28	3720.05	2921.72	3226.37	49.46	897.49	3720.05	2921.72	3171.77
13.9	11.9	10	0.70	0.50	0.73	33.10	27.41	233.7	49.81	975.93	3743.95	2940.49	3383.26	49.81	913.14	3743.95	2940.49	3328.66
14.0	12.0	10	0.70	0.50	0.73	33.10	27.39	235.6	50.15	991.69	3767.80	2959.22	3541.01	50.15	928.89	3767.80	2959.22	3486.41
14.1	12.1	10	0.70	0.50	0.73	33.10	27.37	237.6	50.50	1007.55	3791.61	2977.92	3699.62	50.50	944.76	3791.61	2977.92	3645.02
14.2	12.2	10	0.70	0.50	0.73	33.10	27.36	239.5	50.85	1023.53	3815.37	2996.59	3859.08	50.85	960.73	3815.37	2996.59	3804.48
14.3	12.3	10	0.70	0.50	0.73	33.10	27.34	241.5	51.20	1039.61	3839.10	3015.22	4019.39	51.20	976.82	3839.10	3015.22	3964.79
14.4	12.4	10	0.70	0.50	0.73	33.10	27.32	243.5	51.55	1055.80	3862.78	3033.82	4180.56	51.55	993.01	3862.78	3033.82	4125.96
14.5	12.5	10	0.70	0.50	0.73	33.10	27.31	245.4	51.89	1072.11	3886.41	3052.38	4342.57	51.89	1009.31	3886.41	3052.38	4287.97
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	1091.46	6350.93	4988.01	4508.00	61.62	1028.67	6350.93	4988.01	4453.40
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	1110.95	6389.47	5018.28	4545.19	62.03	1048.16	6389.47	5018.28	4490.59
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	1130.57	6427.93	5048.49	4582.46	62.44	1067.78	6427.93	5048.49	4527.86
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	1150.31	6466.33	5078.64	4619.79	62.85	1087.52	6466.33	5078.64	4565.19
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	1170.19	6504.65	5108.74	4657.20	63.26	1107.40	6504.65	5108.74	4602.60
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	1190.19	6542.91	5138.79	4694.67	63.67	1127.40	6542.91	5138.79	4640.07
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	1210.32	6581.09	5168.78	4732.22	64.08	1147.53	6581.09	5168.78	4677.62
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	1230.58	6619.20	5198.71	4627.44	64.49	1167.79	6619.20	5198.71	4572.84
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	1250.97	6657.24	5228.58	4521.96	64.90	1188.18	6657.24	5228.58	4467.36
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	1271.49	6695.20	5258.40	4415.78	65.31	1208.70	6695.20	5258.40	4361.18
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	1292.14	6733.10	5288.16	4308.90	65.72	1229.35	6733.10	5288.16	4254.30
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	1312.92	6770.92	5317.87	4201.33	66.13	1250.12	6770.92	5317.87	4146.73
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1333.82	6808.66	5347.51	4093.06	66.54	1271.03	6808.66	5347.51	4038.46
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1354.85	6846.33	5377.10	3984.10	66.95	1292.06	6846.33	5377.10	3929.50
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1376.02	6883.93	5406.63	3874.44	67.36	1313.23	6883.93	5406.63	3819.84
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1397.31	6921.45	5436.10	3764.09	67.77	1334.52	6921.45	5436.10	3709.49
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1418.73	6958.90	5465.51	3653.05	68.18	1355.94	6958.90	5465.51	3598.45
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.15	1437.00	4303.98	3380.34	3688.49	58.15	1374.21	4303.98	3380.34	3633.89
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.50	1455.38	4326.73	3398.21	3866.37	58.50	1392.59	4326.73	3398.21	3811.76
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	58.85	1473.87	4349.43	3416.03	4045.06	58.85	1411.08	4349.43	3416.03	3990.46
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.20	1492.46	4372.07	3433.82	4224.57	59.20	1429.67	4372.07	3433.82	4169.97
16.7	14.7	12	0.70	0.50	0.73	33.10	26.91	288.6	59.55	1511.17	4394.67	3451.56	4404.90	59.55	1448.38	4394.67	3451.56	4350.30
16.8	14.8	12	0.70	0.50	0.73	33.10	26.89	290.6	59.89	1529.99	4417.21	3469.27	4586.04	59.89	1467.20	4417.21	3469.27	4531.44
16.9	14.9	12	0.70	0.50	0.73	33.10	26.87	292.6	60.24	1548.91	4439.71	3486.94	4767.99	60.24	1486.12	4439.71	3486.94	4713.39
17.0	15.0	12	0.70	0.50	0.73	33.10	26.85	294.5	60.59	1567.95	4462.15	3504.57	4950.75	60.59	1505.16	4462.15	3504.57	4896.15

1.1.1.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	3344	3300

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	1.3	10.07	2.53	655.09	329.29	279.33	10.07	2.53	655.09	329.29	279.33
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	2.5	10.39	5.14	676.03	339.81	287.43	10.39	5.14	676.03	339.81	287.43
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	3.8	10.71	7.83	696.97	350.34	295.59	10.71	7.83	696.97	350.34	295.59
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	5.0	11.03	10.60	717.91	360.86	303.79	11.03	10.60	717.91	360.86	303.79
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	6.3	11.27	13.44	721.32	362.57	312.03	11.27	13.44	721.32	362.57	312.03
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	7.5	11.59	16.35	741.76	372.85	320.92	11.59	16.35	741.76	372.85	320.92
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	8.8	11.91	19.34	762.20	383.13	329.88	11.91	19.34	762.20	383.13	329.88
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	10.1	12.22	22.41	782.65	393.40	338.90	12.22	22.41	782.65	393.40	338.90
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	11.3	12.54	25.56	803.09	403.68	348.00	12.54	25.56	803.09	403.68	348.00
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	12.6	12.86	28.80	823.54	413.95	357.17	12.86	28.80	823.54	413.95	357.17
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	13.8	13.18	32.11	843.98	424.23	366.40	13.18	32.11	843.98	424.23	366.40
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	15.1	13.50	35.50	864.42	434.51	375.71	13.50	35.50	864.42	434.51	375.71
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	16.3	13.82	38.98	884.87	444.78	385.09	13.82	38.98	884.87	444.78	385.09
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	17.6	14.14	42.53	905.31	455.06	394.53	14.14	42.53	905.31	455.06	394.53
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	18.8	14.46	46.17	925.75	465.34	376.35	14.46	46.17	925.75	465.34	372.15
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	20.1	14.78	49.88	946.20	475.61	357.61	14.78	49.88	946.20	475.61	349.24
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	21.4	15.10	53.67	966.64	485.89	338.31	15.10	53.67	966.64	485.89	325.82
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	22.6	15.42	57.55	987.09	496.16	318.45	15.42	57.55	987.09	496.16	301.88
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	23.9	15.74	61.50	1007.53	506.44	298.03	15.74	61.50	1007.53	506.44	277.42
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	25.1	16.06	65.54	1027.97	516.72	277.05	16.06	65.54	1027.97	516.72	252.44
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	26.4	16.38	69.66	1048.42	526.99	255.51	16.38	69.66	1048.42	526.99	226.94
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	27.6	16.70	73.85	1068.86	537.27	233.40	16.70	73.85	1068.86	537.27	200.92

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	28.9	17.01	78.13	1089.30	547.54	249.18	17.01	78.13	1089.30	547.54	216.69
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	30.2	17.33	82.48	1109.75	557.82	265.13	17.33	82.48	1109.75	557.82	232.64
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	31.4	17.50	86.88	311.97	156.81	281.22	10.63	85.16	187.77	94.38	247.23
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	32.7	17.50	91.28	313.81	157.74	325.10	10.81	87.87	190.81	95.91	293.85
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	33.9	17.50	95.68	315.64	158.66	369.71	10.98	90.63	193.85	97.44	341.20
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	35.2	17.50	100.08	317.47	159.58	415.06	11.15	93.43	196.89	98.97	389.28
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	36.4	17.50	104.48	319.31	160.50	461.13	11.32	96.28	199.93	100.50	438.09
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	37.7	17.50	108.87	321.14	161.42	465.93	11.49	99.17	202.97	102.02	440.56
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	39.0	17.50	113.27	322.97	162.34	470.73	11.67	102.10	206.01	103.55	443.07
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	40.2	17.50	117.67	324.80	163.26	475.53	11.84	105.08	209.05	105.08	445.62
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	41.5	20.81	122.90	1462.27	735.02	481.05	20.81	110.31	1462.27	735.02	450.13
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	42.7	21.15	128.22	1485.69	746.79	448.20	21.15	115.62	1485.69	746.79	412.40
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	44.0	21.48	133.61	1509.11	758.56	414.70	21.48	121.02	1509.11	758.56	374.04
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	45.2	21.81	139.10	1532.54	770.34	380.54	21.81	126.50	1532.54	770.34	335.07
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	46.5	22.15	144.66	1555.96	782.11	345.72	22.15	132.07	1555.96	782.11	295.49
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	47.8	22.48	150.31	1579.38	793.89	310.24	22.48	137.72	1579.38	793.89	255.29
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	49.0	22.81	156.04	1602.81	805.66	274.11	22.81	143.45	1602.81	805.66	214.46
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	161.02	385.18	193.61	236.58	13.36	146.81	235.91	118.58	170.89
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	166.00	387.02	194.53	240.34	13.53	150.21	238.95	120.11	173.72
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	170.97	388.85	195.46	244.09	13.70	153.65	241.99	121.64	176.59
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	175.95	390.68	196.38	247.84	13.88	157.14	245.03	123.16	179.50
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	180.93	392.51	197.30	251.59	14.05	160.67	248.07	124.69	182.44
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	185.90	394.35	198.22	255.35	14.22	164.24	251.10	126.22	185.43
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	190.88	396.18	199.14	259.10	14.39	167.86	254.14	127.75	188.45
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	195.85	398.01	200.06	262.85	14.56	171.52	257.18	129.27	191.50
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	200.83	399.85	200.98	266.61	14.74	175.23	260.22	130.80	194.60
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	205.81	401.68	201.91	270.36	14.91	178.97	263.26	132.33	197.73
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	210.78	403.51	202.83	274.11	15.08	182.76	266.30	133.86	200.90
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	215.76	405.35	203.75	277.87	15.25	186.60	269.34	135.39	204.11
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	220.74	407.18	204.67	281.62	15.42	190.47	272.38	136.91	207.36
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	225.71	409.01	205.59	285.37	15.60	194.39	275.42	138.44	210.64
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	230.69	410.84	206.51	289.13	15.77	198.36	278.46	139.97	213.96
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	235.67	412.68	207.43	292.88	15.94	202.36	281.50	141.50	217.31
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	240.64	414.51	208.36	296.63	16.11	206.41	284.54	143.02	220.69
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	245.62	416.34	209.28	300.38	16.29	210.51	287.58	144.55	224.10
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	250.59	418.18	210.20	304.14	16.46	214.64	290.62	146.08	227.53
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	255.57	420.01	211.12	307.89	16.63	218.82	293.65	147.61	231.00
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	260.55	421.84	212.04	311.64	16.80	223.04	296.69	149.13	234.49
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	265.52	423.68	212.96	315.40	16.97	227.31	299.73	150.66	238.00
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	270.50	425.51	213.88	319.15	17.15	231.62	302.77	152.19	241.55
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	275.48	427.34	214.81	322.90	17.32	235.97	305.81	153.72	245.12
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	280.45	429.17	215.73	326.66	17.49	240.37	308.85	155.25	248.72
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	285.43	431.01	216.65	330.41	17.66	244.81	311.62	156.64	252.34
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	290.40	432.84	217.57	334.16	17.83	249.29	314.39	158.03	256.00
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	295.38	434.67	218.49	337.92	18.01	253.81	317.15	159.42	259.69
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	300.36	436.51	219.41	341.67	18.18	258.38	319.91	160.80	263.42
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	305.33	438.34	220.33	401.38	18.35	263.00	322.66	162.18	326.77

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	310.31	440.17	221.25	461.67	18.52	267.65	325.40	163.56	390.69
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	315.29	442.01	222.18	522.53	18.70	272.35	328.13	164.94	455.20
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	320.26	443.84	223.10	583.96	18.87	277.09	330.86	166.31	520.28
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	325.24	445.67	224.02	645.96	19.04	281.88	333.58	167.68	585.93
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	330.21	447.50	224.94	708.52	19.21	286.70	336.30	169.04	652.16
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	335.19	449.34	225.86	771.65	19.38	291.58	339.01	170.40	718.96
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	340.17	451.17	226.78	835.34	19.56	296.49	341.71	171.76	786.33
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	345.14	453.00	227.70	845.21	19.73	301.45	344.40	173.12	790.47
9.8	7.8	5	0.66	0.50	0.40	19.00	3.52	98.0	19.80	350.12	454.84	228.63	855.08	19.90	306.45	347.09	174.47	794.65
9.9	7.9	6	0.70	0.50	0.67	30.80	21.21	99.3	33.29	358.49	2110.01	1060.61	867.91	33.29	314.82	2110.01	1060.61	801.75
10.0	8.0	6	0.70	0.50	0.67	30.80	21.20	100.5	33.61	366.93	2128.74	1070.02	824.84	33.61	323.27	2128.74	1070.02	749.34
10.1	8.1	6	0.70	0.50	0.67	30.80	21.18	101.8	33.93	375.46	2147.42	1079.41	781.26	33.93	331.79	2147.42	1079.41	696.45
10.2	8.2	6	0.70	0.50	0.67	30.80	21.17	103.0	34.25	384.07	2166.07	1088.79	737.19	34.25	340.40	2166.07	1088.79	643.08
10.3	8.3	6	0.70	0.50	0.67	30.80	21.15	104.3	34.57	392.76	2184.68	1098.14	692.61	34.57	349.09	2184.68	1098.14	589.24
10.4	8.4	6	0.70	0.50	0.67	30.80	21.14	105.6	34.89	401.53	2203.25	1107.47	647.54	34.89	357.86	2203.25	1107.47	534.93
10.5	8.5	6	0.70	0.50	0.67	30.80	21.12	106.8	35.21	410.38	2221.78	1116.79	601.97	35.21	366.71	2221.78	1116.79	480.14
10.6	8.6	6	0.70	0.50	0.67	30.80	21.11	108.1	35.53	419.30	2240.27	1126.08	555.91	35.53	375.64	2240.27	1126.08	424.89
10.7	8.7	7	0.50	0.50	0.40	19.00	3.49	109.3	25.00	425.59	652.15	327.81	591.40	21.61	381.07	373.82	187.90	459.63
10.8	8.8	7	0.50	0.50	0.40	19.00	3.49	110.6	25.00	431.87	653.98	328.73	681.44	21.79	386.54	376.44	189.22	558.39
10.9	8.9	7	0.50	0.50	0.40	19.00	3.49	111.8	25.00	438.15	655.82	329.65	840.06	21.96	392.06	379.04	190.53	725.75
11.0	9.0	7	0.50	0.50	0.40	19.00	3.48	113.1	25.00	444.44	657.65	330.57	999.93	22.13	397.62	381.64	191.84	894.36
11.1	9.1	7	0.50	0.50	0.40	19.00	3.48	114.4	25.00	450.72	659.48	331.49	1161.04	22.30	403.23	384.24	193.14	1064.22
11.2	9.2	7	0.50	0.50	0.40	19.00	3.48	115.6	25.00	457.00	661.31	332.41	1323.39	22.47	408.88	386.82	194.44	1235.33
11.3	9.3	7	0.50	0.50	0.40	19.00	3.47	116.9	25.00	463.29	663.15	333.33	1486.96	22.65	414.57	389.40	195.73	1407.69
11.4	9.4	7	0.50	0.50	0.40	19.00	3.47	118.1	25.00	469.57	664.98	334.26	1651.77	22.82	420.30	391.97	197.03	1581.28
11.5	9.5	7	0.50	0.50	0.40	19.00	3.47	119.4	25.00	475.85	666.81	335.18	1817.81	22.99	426.08	394.53	198.31	1756.12
11.6	9.6	7	0.50	0.50	0.40	19.00	3.46	120.6	25.00	482.14	668.65	336.10	1985.07	23.16	431.90	397.09	199.60	1932.19
11.7	9.7	8	0.70	0.50	0.73	33.10	27.37	121.9	42.15	492.73	3164.36	1590.58	2157.30	42.15	442.50	3164.36	1590.58	2113.62
11.8	9.8	8	0.70	0.50	0.73	33.10	27.35	123.2	42.50	503.41	3188.01	1602.47	2246.41	42.50	453.18	3188.01	1602.47	2202.73
11.9	9.9	9	0.70	0.50	0.86	37.70	44.38	124.4	50.54	516.11	5216.02	2621.86	2337.75	50.54	465.88	5216.02	2621.86	2294.07
12.0	10.0	9	0.70	0.50	0.86	37.70	44.35	125.7	50.95	528.92	5254.55	2641.23	2361.81	50.95	478.69	5254.55	2641.23	2318.13
12.1	10.1	9	0.70	0.50	0.86	37.70	44.32	126.9	51.36	541.83	5293.00	2660.55	2385.93	51.36	491.60	5293.00	2660.55	2342.24
12.2	10.2	9	0.70	0.50	0.86	37.70	44.29	128.2	51.77	554.84	5331.36	2679.83	2410.10	51.77	504.61	5331.36	2679.83	2366.42
12.3	10.3	9	0.70	0.50	0.86	37.70	44.25	129.4	52.18	567.96	5369.63	2699.07	2434.33	52.18	517.72	5369.63	2699.07	2390.65
12.4	10.4	9	0.70	0.50	0.86	37.70	44.22	130.7	52.59	581.18	5407.81	2718.26	2458.61	52.59	530.94	5407.81	2718.26	2414.93
12.5	10.5	9	0.70	0.50	0.86	37.70	44.19	131.9	53.00	594.50	5445.90	2737.41	2407.11	53.00	544.26	5445.90	2737.41	2363.43
12.6	10.6	9	0.70	0.50	0.86	37.70	44.15	133.2	53.41	607.92	5483.90	2756.51	2355.18	53.41	557.69	5483.90	2756.51	2311.50
12.7	10.7	9	0.70	0.50	0.86	37.70	44.12	134.5	53.82	621.45	5521.81	2775.57	2302.81	53.82	571.22	5521.81	2775.57	2259.13
12.8	10.8	9	0.70	0.50	0.86	37.70	44.09	135.7	54.23	635.08	5559.63	2794.58	2250.01	54.23	584.85	5559.63	2794.58	2206.33
12.9	10.9	9	0.70	0.50	0.86	37.70	44.05	137.0	54.65	648.81	5597.36	2813.54	2196.78	54.65	598.58	5597.36	2813.54	2153.10
13.0	11.0	9	0.70	0.50	0.86	37.70	44.02	138.2	55.06	662.65	5634.99	2832.46	2143.12	55.06	612.42	5634.99	2832.46	2099.44
13.1	11.1	9	0.70	0.50	0.86	37.70	43.98	139.5	55.47	676.59	5672.53	2851.32	2089.03	55.47	626.36	5672.53	2851.32	2045.35
13.2	11.2	9	0.70	0.50	0.86	37.70	43.95	140.7	55.88	690.63	5709.98	2870.15	2034.50	55.88	640.40	5709.98	2870.15	1990.82
13.3	11.3	9	0.70	0.50	0.86	37.70	43.91	142.0	56.29	704.78	5747.33	2888.92	1979.55	56.29	654.55	5747.33	2888.92	1935.87
13.4	11.4	9	0.70	0.50	0.86	37.70	43.88	143.3	56.70	719.03	5784.58	2907.65	1924.18	56.70	668.80	5784.58	2907.65	1880.50
13.5	11.5	10	0.70	0.50	0.73	33.10	26.97	144.5	48.41	731.20	3581.31	1800.16	1866.47	48.41	680.96	3581.31	1800.16	1822.79
13.6	11.6	10	0.70	0.50	0.73	33.10	26.95	145.8	48.76	743.45	3603.91	1811.52	1965.32	48.76	693.22	3603.91	1811.52	1921.64

13.7	11.7	10	0.70	0.50	0.73	33.10	26.92	147.0	49.11	755.80	3626.44	1822.85	2064.70	49.11	705.56	3626.44	1822.85	2021.02
13.8	11.8	10	0.70	0.50	0.73	33.10	26.90	148.3	49.46	768.23	3648.91	1834.14	2164.60	49.46	717.99	3648.91	1834.14	2120.92
13.9	11.9	10	0.70	0.50	0.73	33.10	26.88	149.5	49.81	780.74	3671.31	1845.40	2265.11	49.81	730.51	3671.31	1845.40	2221.43
14.0	12.0	10	0.70	0.50	0.73	33.10	26.85	150.8	50.15	793.35	3693.65	1856.63	2366.22	50.15	743.12	3693.65	1856.63	2322.54
14.1	12.1	10	0.70	0.50	0.73	33.10	26.83	152.1	50.50	806.04	3715.93	1867.83	2467.94	50.50	755.81	3715.93	1867.83	2424.26
14.2	12.2	10	0.70	0.50	0.73	33.10	26.80	153.3	50.85	818.82	3738.14	1878.99	2570.27	50.85	768.59	3738.14	1878.99	2526.59
14.3	12.3	10	0.70	0.50	0.73	33.10	26.78	154.6	51.20	831.69	3760.28	1890.12	2673.20	51.20	781.45	3760.28	1890.12	2629.52
14.4	12.4	10	0.70	0.50	0.73	33.10	26.75	155.8	51.55	844.64	3782.36	1901.22	2776.75	51.55	794.41	3782.36	1901.22	2733.07
14.5	12.5	10	0.70	0.50	0.73	33.10	26.73	157.1	51.89	857.68	3804.37	1912.29	2880.90	51.89	807.45	3804.37	1912.29	2837.22
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	873.17	6223.90	3128.47	2987.72	61.62	822.94	6223.90	3128.47	2944.03
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	888.76	6259.84	3146.54	3014.00	62.03	838.53	6259.84	3146.54	2970.32
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	904.45	6295.68	3164.55	3040.43	62.44	854.22	6295.68	3164.55	2996.75
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	920.25	6333.77	3183.70	3067.02	62.85	870.02	6333.77	3183.70	3023.34
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	936.15	6371.82	3202.83	3093.68	63.26	885.92	6371.82	3202.83	3050.00
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	952.15	6409.83	3221.93	3120.42	63.67	901.92	6409.83	3221.93	3076.74
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	968.26	6447.80	3241.02	3147.23	64.08	918.02	6447.80	3241.02	3103.55
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	984.47	6485.73	3260.09	3084.65	64.49	934.23	6485.73	3260.09	3040.97
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	1000.78	6523.62	3279.13	3021.66	64.90	950.55	6523.62	3279.13	2977.98
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	1017.19	6561.47	3298.15	2958.27	65.31	966.96	6561.47	3298.15	2914.59
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	1033.71	6599.28	3317.16	2894.46	65.72	983.48	6599.28	3317.16	2850.78
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	1050.33	6637.04	3336.14	2830.24	66.13	1000.10	6637.04	3336.14	2786.56
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	1067.06	6674.77	3355.10	2765.62	66.54	1016.82	6674.77	3355.10	2721.94
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	1083.88	6712.45	3374.05	2700.58	66.95	1033.65	6712.45	3374.05	2656.90
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	1100.81	6750.09	3392.97	2635.14	67.36	1050.58	6750.09	3392.97	2591.46
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	1117.85	6787.70	3411.87	2569.29	67.77	1067.61	6787.70	3411.87	2525.61
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	1134.98	6825.26	3430.75	2503.04	68.18	1084.75	6825.26	3430.75	2459.36
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.15	1149.60	4219.86	2121.13	2528.38	58.15	1099.37	4219.86	2121.13	2484.70
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.50	1164.30	4242.99	2132.76	2643.25	58.50	1114.07	4242.99	2132.76	2599.57
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	58.85	1179.09	4266.10	2144.38	2758.67	58.85	1128.86	4266.10	2144.38	2714.99
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.20	1193.97	4289.18	2155.98	2874.63	59.20	1143.74	4289.18	2155.98	2830.95
16.7	14.7	12	0.70	0.50	0.73	33.10	26.40	184.7	59.55	1208.94	4312.24	2167.57	2991.13	59.55	1158.70	4312.24	2167.57	2947.45
16.8	14.8	12	0.70	0.50	0.73	33.10	26.39	186.0	59.89	1223.99	4335.28	2179.15	3108.19	59.89	1173.76	4335.28	2179.15	3064.51
16.9	14.9	12	0.70	0.50	0.73	33.10	26.38	187.2	60.24	1239.13	4358.29	2190.71	3225.78	60.24	1188.90	4358.29	2190.71	3182.10
17.0	15.0	12	0.70	0.50	0.73	33.10	26.37	188.5	60.59	1254.36	4381.27	2202.27	3343.92	60.59	1204.12	4381.27	2202.27	3300.24

1.1.1.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.4	19.35			0.70	0.50	0.00
2	2.4	4.4	19.35			0.70	0.50	0.00
3	4.4	5.2	18.33	22	25	0.70	0.50	0.40
4	5.2	5.9	19.35			0.70	0.50	0.00
5	5.9	9.8	18.33	22	30	0.66	0.50	0.40
6	9.8	10.6	19.35	34		0.70	0.50	0.67
7	10.6	11.6	18.33	22	50	0.50	0.50	0.40
8	11.6	11.8	19.35			0.70	0.50	0.00
9	11.8	13.4	19.35	41		0.70	0.50	0.86
10	13.4	14.5	19.35			0.70	0.50	0.00
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35			0.70	0.50	0.00
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35			0.70	0.50	0.00
15	26.0	27.9	18.33	22	175	0.35	0.50	0.40

1.1.1.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5333	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	-2.83
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	-5.65
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	-8.48
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	-14.14
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	-16.96
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	-19.79
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	-22.62
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	-25.45
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	-28.27
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	-31.10
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	-33.93
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	-36.76
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	-39.58
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	-18.65
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	2.42
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	23.63
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	44.98
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	66.47
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	88.10
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	109.87
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	62.2	0.00	0.00	0.00	0.00	131.78

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	65.0	0.00	0.00	0.00	0.00	128.96
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	67.9	0.00	0.00	0.00	0.00	126.13
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	70.7	17.50	6.60	311.97	352.83	129.04
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	73.5	17.50	13.19	313.81	354.91	108.19
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	76.3	17.50	19.79	315.64	356.98	87.20
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	79.2	17.50	26.39	317.47	359.05	66.07
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	82.0	17.50	32.99	319.31	361.13	44.80
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	84.8	17.50	39.58	321.14	363.20	52.73
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	87.7	17.50	46.18	322.97	365.27	60.65
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	90.5	17.50	52.78	324.80	367.34	68.58
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	52.78	0.00	0.00	70.77
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	52.78	0.00	0.00	97.83
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	52.78	0.00	0.00	125.04
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	52.78	0.00	0.00	152.39
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	52.78	0.00	0.00	179.87
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	52.78	0.00	0.00	207.50
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	52.78	0.00	0.00	235.26
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	60.24	385.18	435.63	269.66
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	67.71	387.02	437.70	274.85
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	75.17	388.85	439.78	280.05
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	82.64	390.68	441.85	285.25
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	90.10	392.51	443.92	290.45
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	97.57	394.35	446.00	295.65
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	105.03	396.18	448.07	300.85
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	112.49	398.01	450.14	306.05
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	119.96	399.85	452.22	311.25
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	127.42	401.68	454.29	316.45
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	134.89	403.51	456.36	321.65
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	142.35	405.35	458.43	326.84
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	149.82	407.18	460.51	332.04
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	157.28	409.01	462.58	337.24
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	164.75	410.84	464.65	342.44
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	172.21	412.68	466.73	347.64
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	179.67	414.51	468.80	352.84
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	187.14	416.34	470.87	358.04
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	194.60	418.18	472.95	363.24
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	202.07	420.01	475.02	368.44
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	209.53	421.84	477.09	373.64
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	217.00	423.68	479.17	378.83
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	224.46	425.51	481.24	384.03
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	231.92	427.34	483.31	389.23
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	239.39	429.17	485.38	394.43
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	246.85	431.01	487.46	399.63
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	254.32	432.84	489.53	404.83
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	261.78	434.67	491.60	410.03
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	269.25	436.51	493.68	415.23
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	276.71	438.34	495.75	547.97

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	284.18	440.17	497.82	682.14
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	291.64	442.01	499.90	817.72
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	299.10	443.84	501.97	954.72
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	306.57	445.67	504.04	1093.14
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	314.03	447.50	506.12	1232.97
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	321.50	449.34	508.19	1374.23
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	328.96	451.17	510.26	1516.90
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	336.43	453.00	512.33	1535.87
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	220.5	19.80	343.89	454.84	514.41	1554.84
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	223.4	33.29	356.44	2131.42	2410.58	1578.23
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	226.2	33.61	369.11	2151.87	2433.70	1474.18
10.1	8.1	6	0.70	0.50	0.67	30.80	21.43	229.0	33.93	381.90	2172.31	2456.82	1368.81
10.2	8.2	6	0.70	0.50	0.67	30.80	21.43	231.8	34.25	394.82	2192.75	2479.95	1262.14
10.3	8.3	6	0.70	0.50	0.67	30.80	21.43	234.7	34.57	407.85	2213.20	2503.07	1154.15
10.4	8.4	6	0.70	0.50	0.67	30.80	21.43	237.5	34.89	421.00	2233.64	2526.19	1044.85
10.5	8.5	6	0.70	0.50	0.67	30.80	21.43	240.3	35.21	434.27	2254.08	2549.31	934.23
10.6	8.6	6	0.70	0.50	0.67	30.80	21.43	243.2	35.53	447.67	2274.53	2572.43	822.30
10.7	8.7	7	0.50	0.50	0.40	19.00	3.57	246.0	25.00	457.09	652.15	737.56	654.44
10.8	8.8	7	0.50	0.50	0.40	19.00	3.57	248.8	25.00	466.52	653.98	739.64	610.14
10.9	8.9	7	0.50	0.50	0.40	19.00	3.57	251.6	25.00	475.94	655.82	741.71	971.42
11.0	9.0	7	0.50	0.50	0.40	19.00	3.57	254.5	25.00	485.37	657.65	743.78	1335.69
11.1	9.1	7	0.50	0.50	0.40	19.00	3.57	257.3	25.00	494.79	659.48	745.86	1702.96
11.2	9.2	7	0.50	0.50	0.40	19.00	3.57	260.1	25.00	504.22	661.31	747.93	2073.23
11.3	9.3	7	0.50	0.50	0.40	19.00	3.57	263.0	25.00	513.64	663.15	750.00	2446.49
11.4	9.4	7	0.50	0.50	0.40	19.00	3.57	265.8	25.00	523.07	664.98	752.07	2822.73
11.5	9.5	7	0.50	0.50	0.40	19.00	3.57	268.6	25.00	532.49	666.81	754.15	3201.96
11.6	9.6	7	0.50	0.50	0.40	19.00	3.57	271.4	25.00	541.92	668.65	756.22	3584.17
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	274.3	0.00	541.92	0.00	0.00	3961.17
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	277.1	0.00	541.92	0.00	0.00	4392.20
11.9	9.9	9	0.70	0.50	0.86	37.70	45.33	279.9	50.54	560.97	5327.12	6024.83	4842.91
12.0	10.0	9	0.70	0.50	0.86	37.70	45.31	282.7	50.95	580.18	5368.36	6071.47	4891.15
12.1	10.1	9	0.70	0.50	0.86	37.70	45.29	285.6	51.36	599.54	5409.55	6118.06	4939.49
12.2	10.2	9	0.70	0.50	0.86	37.70	45.28	288.4	51.77	619.06	5450.70	6164.60	4987.92
12.3	10.3	9	0.70	0.50	0.86	37.70	45.26	291.2	52.18	638.73	5491.81	6211.09	5036.45
12.4	10.4	9	0.70	0.50	0.86	37.70	45.24	294.1	52.59	658.56	5532.87	6257.53	5085.08
12.5	10.5	9	0.70	0.50	0.86	37.70	45.23	296.9	53.00	678.54	5573.89	6303.92	4678.25
12.6	10.6	9	0.70	0.50	0.86	37.70	45.21	299.7	53.41	698.68	5614.87	6350.27	4268.42
12.7	10.7	9	0.70	0.50	0.86	37.70	45.19	302.5	53.82	718.97	5655.80	6396.56	3855.61
12.8	10.8	9	0.70	0.50	0.86	37.70	45.17	305.4	54.23	739.42	5696.69	6442.80	3439.82
12.9	10.9	9	0.70	0.50	0.86	37.70	45.16	308.2	54.65	760.02	5737.53	6488.99	3021.05
13.0	11.0	9	0.70	0.50	0.86	37.70	45.14	311.0	55.06	780.77	5778.33	6535.14	2599.30
13.1	11.1	9	0.70	0.50	0.86	37.70	45.12	313.8	55.47	801.68	5819.08	6581.23	2174.58
13.2	11.2	9	0.70	0.50	0.86	37.70	45.10	316.7	55.88	822.75	5859.79	6627.26	1746.89
13.3	11.3	9	0.70	0.50	0.86	37.70	45.08	319.5	56.29	843.97	5900.45	6673.25	1316.23
13.4	11.4	9	0.70	0.50	0.86	37.70	45.07	322.3	56.70	865.34	5941.06	6719.19	882.61
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	325.2	0.00	865.34	0.00	0.00	427.32
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	328.0	0.00	865.34	0.00	0.00	913.80

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	330.8	0.00	865.34	0.00	0.00	1403.32
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	333.6	0.00	865.34	0.00	0.00	1895.89
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	336.5	0.00	865.34	0.00	0.00	2391.49
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	339.3	0.00	865.34	0.00	0.00	2890.13
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	342.1	0.00	865.34	0.00	0.00	3391.80
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	344.9	0.00	865.34	0.00	0.00	3896.50
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	347.8	0.00	865.34	0.00	0.00	4404.22
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	350.6	0.00	865.34	0.00	0.00	4914.96
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	353.4	0.00	865.34	0.00	0.00	5428.71
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	888.57	6424.74	7266.21	5965.67
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	911.96	6464.73	7311.44	6016.47
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	935.50	6504.67	7356.61	6067.35
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	959.19	6544.56	7401.73	6118.33
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	983.04	6584.40	7446.78	6169.40
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1007.04	6624.19	7491.78	6220.56
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1031.20	6663.93	7536.72	6271.81
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1055.51	6703.61	7581.61	5782.60
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1079.98	6743.25	7626.43	5290.50
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1104.60	6782.83	7671.20	4795.52
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1129.38	6822.36	7715.90	4297.66
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1154.31	6861.83	7760.55	3796.92
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1179.40	6901.26	7805.14	3293.32
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1204.64	6940.63	7849.66	2786.84
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1230.04	6979.94	7894.13	2277.50
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1255.59	7019.21	7938.54	1765.30
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1281.29	7058.42	7982.88	1250.24
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1281.29	0.00	0.00	1279.98
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1281.29	0.00	0.00	1850.23
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1281.29	0.00	0.00	2423.40
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1281.29	0.00	0.00	2999.50
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	415.6	0.00	1281.29	0.00	0.00	3578.52
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	418.5	0.00	1281.29	0.00	0.00	4160.46
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1281.29	0.00	0.00	4745.32
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1281.29	0.00	0.00	5333.08

1.1.1.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	3804	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	-1.96
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	-3.93
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	-5.89
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	-7.85
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	-9.82
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	-11.78
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	-13.74
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	-15.71
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	-17.67
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	-19.63
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	-21.60
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	-23.56
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	-25.53
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	-27.49
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	-12.95
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	1.68
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	16.41
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	31.24
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	46.16
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	61.18
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	76.30
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	43.2	0.00	0.00	0.00	0.00	91.52

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	89.55
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	47.1	0.00	0.00	0.00	0.00	87.59
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	49.1	17.50	5.50	311.97	245.02	90.41
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	51.1	17.50	11.00	313.81	246.46	76.72
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	53.0	17.50	16.49	315.64	247.90	62.94
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	55.0	17.50	21.99	317.47	249.34	49.07
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	56.9	17.50	27.49	319.31	250.78	35.09
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	58.9	17.50	32.99	321.14	252.22	41.40
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	60.9	17.50	38.48	322.97	253.66	47.70
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	62.8	17.50	43.98	324.80	255.10	54.00
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	43.98	0.00	0.00	55.52
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	43.98	0.00	0.00	74.32
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	43.98	0.00	0.00	93.21
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	43.98	0.00	0.00	112.20
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	43.98	0.00	0.00	131.29
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	43.98	0.00	0.00	150.47
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	43.98	0.00	0.00	169.75
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	50.20	385.18	302.52	194.54
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	56.42	387.02	303.96	199.05
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	62.64	388.85	305.40	203.56
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	68.86	390.68	306.84	208.07
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	75.08	392.51	308.28	212.58
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	81.30	394.35	309.72	217.10
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	87.52	396.18	311.16	221.61
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	93.75	398.01	312.60	226.12
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	99.97	399.85	314.04	230.63
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	106.19	401.68	315.48	235.14
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	112.41	403.51	316.92	239.66
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	118.63	405.35	318.36	244.17
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	124.85	407.18	319.80	248.68
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	131.07	409.01	321.24	253.19
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	137.29	410.84	322.68	257.70
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	143.51	412.68	324.12	262.22
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	149.73	414.51	325.56	266.73
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	155.95	416.34	327.00	271.24
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	162.17	418.18	328.43	275.75
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	168.39	420.01	329.87	280.26
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	174.61	421.84	331.31	284.77
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	180.83	423.68	332.75	289.29
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	187.05	425.51	334.19	293.80
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	193.27	427.34	335.63	298.31
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	199.49	429.17	337.07	302.82
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	205.71	431.01	338.51	307.33
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	211.93	432.84	339.95	311.85
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	218.15	434.67	341.39	316.36
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	224.37	436.51	342.83	320.87
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	230.59	438.34	344.27	413.96

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	236.81	440.17	345.71	508.03
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	243.03	442.01	347.15	603.03
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	249.25	443.84	348.59	698.95
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	255.47	445.67	350.03	795.79
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	261.69	447.50	351.47	893.56
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	267.92	449.34	352.91	992.24
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	274.14	451.17	354.35	1091.85
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	280.36	453.00	355.79	1105.92
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	153.2	19.80	286.58	454.84	357.23	1120.00
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	155.1	33.29	297.04	2131.42	1674.01	1137.76
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	157.1	33.61	307.59	2151.87	1690.07	1067.03
10.1	8.1	6	0.70	0.50	0.67	30.80	21.42	159.0	33.93	318.25	2171.20	1705.25	995.40
10.2	8.2	6	0.70	0.50	0.67	30.80	21.41	161.0	34.25	329.01	2190.50	1720.42	922.94
10.3	8.3	6	0.70	0.50	0.67	30.80	21.40	163.0	34.57	339.87	2209.78	1735.56	849.64
10.4	8.4	6	0.70	0.50	0.67	30.80	21.39	164.9	34.89	350.83	2229.03	1750.68	775.51
10.5	8.5	6	0.70	0.50	0.67	30.80	21.37	166.9	35.21	361.90	2248.26	1765.78	700.54
10.6	8.6	6	0.70	0.50	0.67	30.80	21.36	168.9	35.53	373.06	2267.45	1780.85	624.74
10.7	8.7	7	0.50	0.50	0.40	19.00	3.55	170.8	25.00	380.91	652.15	512.20	509.68
10.8	8.8	7	0.50	0.50	0.40	19.00	3.55	172.8	25.00	388.76	653.98	513.64	480.05
10.9	8.9	7	0.50	0.50	0.40	19.00	3.55	174.8	25.00	396.62	655.82	515.08	729.89
11.0	9.0	7	0.50	0.50	0.40	19.00	3.54	176.7	25.00	404.47	657.65	516.52	981.76
11.1	9.1	7	0.50	0.50	0.40	19.00	3.54	178.7	25.00	412.33	659.48	517.96	1235.66
11.2	9.2	7	0.50	0.50	0.40	19.00	3.54	180.6	25.00	420.18	661.31	519.39	1491.58
11.3	9.3	7	0.50	0.50	0.40	19.00	3.54	182.6	25.00	428.03	663.15	520.83	1749.52
11.4	9.4	7	0.50	0.50	0.40	19.00	3.53	184.6	25.00	435.89	664.98	522.27	2009.49
11.5	9.5	7	0.50	0.50	0.40	19.00	3.53	186.5	25.00	443.74	666.81	523.71	2271.47
11.6	9.6	7	0.50	0.50	0.40	19.00	3.53	188.5	25.00	451.60	668.65	525.15	2535.46
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	190.5	0.00	451.60	0.00	0.00	2794.64
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	192.4	0.00	451.60	0.00	0.00	3091.28
11.9	9.9	9	0.70	0.50	0.86	37.70	44.98	194.4	50.54	467.48	5285.79	4151.45	3403.83
12.0	10.0	9	0.70	0.50	0.86	37.70	44.95	196.3	50.95	483.48	5326.04	4183.06	3439.03
12.1	10.1	9	0.70	0.50	0.86	37.70	44.93	198.3	51.36	499.62	5366.23	4214.63	3474.31
12.2	10.2	9	0.70	0.50	0.86	37.70	44.91	200.3	51.77	515.88	5406.36	4246.15	3509.66
12.3	10.3	9	0.70	0.50	0.86	37.70	44.89	202.2	52.18	532.28	5446.44	4277.62	3545.09
12.4	10.4	9	0.70	0.50	0.86	37.70	44.86	204.2	52.59	548.80	5486.45	4309.05	3580.60
12.5	10.5	9	0.70	0.50	0.86	37.70	44.84	206.2	53.00	565.45	5526.41	4340.43	3302.94
12.6	10.6	9	0.70	0.50	0.86	37.70	44.82	208.1	53.41	582.23	5566.31	4371.77	3023.29
12.7	10.7	9	0.70	0.50	0.86	37.70	44.79	210.1	53.82	599.14	5606.14	4403.05	2741.63
12.8	10.8	9	0.70	0.50	0.86	37.70	44.77	212.1	54.23	616.18	5645.91	4434.29	2457.98
12.9	10.9	9	0.70	0.50	0.86	37.70	44.75	214.0	54.65	633.35	5685.63	4465.48	2172.34
13.0	11.0	9	0.70	0.50	0.86	37.70	44.72	216.0	55.06	650.64	5725.28	4496.62	1884.71
13.1	11.1	9	0.70	0.50	0.86	37.70	44.70	217.9	55.47	668.07	5764.87	4527.72	1595.10
13.2	11.2	9	0.70	0.50	0.86	37.70	44.68	219.9	55.88	685.62	5804.39	4558.76	1303.50
13.3	11.3	9	0.70	0.50	0.86	37.70	44.65	221.9	56.29	703.31	5843.85	4589.75	1009.93
13.4	11.4	9	0.70	0.50	0.86	37.70	44.63	223.8	56.70	721.12	5883.25	4620.70	714.38
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	225.8	0.00	721.12	0.00	0.00	401.26
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	227.8	0.00	721.12	0.00	0.00	735.19

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	229.7	0.00	721.12	0.00	0.00	1071.15
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	231.7	0.00	721.12	0.00	0.00	1409.16
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	233.7	0.00	721.12	0.00	0.00	1749.19
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	235.6	0.00	721.12	0.00	0.00	2091.25
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	237.6	0.00	721.12	0.00	0.00	2435.33
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	239.5	0.00	721.12	0.00	0.00	2781.43
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	241.5	0.00	721.12	0.00	0.00	3129.55
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	243.5	0.00	721.12	0.00	0.00	3479.68
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	245.4	0.00	721.12	0.00	0.00	3831.82
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	740.48	6350.93	4988.01	4202.79
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	759.96	6389.47	5018.28	4239.99
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	779.58	6427.93	5048.49	4277.25
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	799.33	6466.33	5078.64	4314.59
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	819.20	6504.65	5108.74	4351.99
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	839.20	6542.91	5138.79	4389.47
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	859.33	6581.09	5168.78	4427.01
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	879.60	6619.20	5198.71	4094.60
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	899.99	6657.24	5228.58	3760.29
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	920.50	6695.20	5258.40	3424.07
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	941.15	6733.10	5288.16	3085.96
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	961.93	6770.92	5317.87	2745.96
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	982.83	6808.66	5347.51	2404.07
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1003.87	6846.33	5377.10	2060.29
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1025.03	6883.93	5406.63	1714.64
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1046.32	6921.45	5436.10	1367.11
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1067.74	6958.90	5465.51	1017.70
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1067.74	0.00	0.00	1037.25
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1067.74	0.00	0.00	1426.78
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1067.74	0.00	0.00	1818.24
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1067.74	0.00	0.00	2211.61
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	288.6	0.00	1067.74	0.00	0.00	2606.91
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	290.6	0.00	1067.74	0.00	0.00	3004.11
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1067.74	0.00	0.00	3403.23
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1067.74	0.00	0.00	3804.25

1.1.1.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	2549	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	-1.26
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	-2.51
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	-3.77
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	-5.03
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	-6.28
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	-7.54
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	-8.80
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	-10.05
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	-12.57
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	-13.82
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	-15.08
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	-16.34
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	-17.59
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	-8.29
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	1.08
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	10.50
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	19.99
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	29.54
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	39.16
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	48.83
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	27.6	0.00	0.00	0.00	0.00	58.57

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	28.9	0.00	0.00	0.00	0.00	57.31
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	30.2	0.00	0.00	0.00	0.00	56.06
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	31.4	17.50	4.40	311.97	156.81	58.63
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	32.7	17.50	8.80	313.81	157.74	50.63
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	33.9	17.50	13.19	315.64	158.66	42.58
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	35.2	17.50	17.59	317.47	159.58	34.46
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	36.4	17.50	21.99	319.31	160.50	26.28
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	37.7	17.50	26.39	321.14	161.42	31.08
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	39.0	17.50	30.79	322.97	162.34	35.88
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	40.2	17.50	35.19	324.80	163.26	40.68
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	35.19	0.00	0.00	41.65
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	35.19	0.00	0.00	53.68
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	35.19	0.00	0.00	65.77
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	35.19	0.00	0.00	77.93
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	35.19	0.00	0.00	90.14
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	35.19	0.00	0.00	102.42
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	35.19	0.00	0.00	114.76
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	40.16	385.18	193.61	131.49
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	45.14	387.02	194.53	135.24
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	50.11	388.85	195.46	138.99
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	55.09	390.68	196.38	142.75
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	60.07	392.51	197.30	146.50
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	65.04	394.35	198.22	150.25
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	70.02	396.18	199.14	154.01
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	75.00	398.01	200.06	157.76
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	79.97	399.85	200.98	161.51
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	84.95	401.68	201.91	165.27
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	89.92	403.51	202.83	169.02
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	94.90	405.35	203.75	172.77
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	99.88	407.18	204.67	176.52
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	104.85	409.01	205.59	180.28
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	109.83	410.84	206.51	184.03
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	114.81	412.68	207.43	187.78
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	119.78	414.51	208.36	191.54
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	124.76	416.34	209.28	195.29
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	129.74	418.18	210.20	199.04
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	134.71	420.01	211.12	202.80
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	139.69	421.84	212.04	206.55
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	144.66	423.68	212.96	210.30
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	149.64	425.51	213.88	214.06
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	154.62	427.34	214.81	217.81
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	159.59	429.17	215.73	221.56
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	164.57	431.01	216.65	225.31
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	169.55	432.84	217.57	229.07
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	174.52	434.67	218.49	232.82
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	179.50	436.51	219.41	236.57
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	184.47	438.34	220.33	296.29

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	189.45	440.17	221.25	356.58
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	194.43	442.01	222.18	417.44
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	199.40	443.84	223.10	478.87
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	204.38	445.67	224.02	540.86
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	209.36	447.50	224.94	603.42
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	214.33	449.34	225.86	666.55
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	219.31	451.17	226.78	730.24
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	224.28	453.00	227.70	740.12
9.8	7.8	5	0.66	0.50	0.40	19.00	3.52	98.0	19.80	229.26	454.84	228.63	749.99
9.9	7.9	6	0.70	0.50	0.67	30.80	21.21	99.3	33.29	237.63	2110.01	1060.61	762.81
10.0	8.0	6	0.70	0.50	0.67	30.80	21.20	100.5	33.61	246.08	2128.74	1070.02	719.74
10.1	8.1	6	0.70	0.50	0.67	30.80	21.18	101.8	33.93	254.60	2147.42	1079.41	676.17
10.2	8.2	6	0.70	0.50	0.67	30.80	21.17	103.0	34.25	263.21	2166.07	1088.79	632.09
10.3	8.3	6	0.70	0.50	0.67	30.80	21.15	104.3	34.57	271.90	2184.68	1098.14	587.52
10.4	8.4	6	0.70	0.50	0.67	30.80	21.14	105.6	34.89	280.67	2203.25	1107.47	542.45
10.5	8.5	6	0.70	0.50	0.67	30.80	21.12	106.8	35.21	289.52	2221.78	1116.79	496.88
10.6	8.6	6	0.70	0.50	0.67	30.80	21.11	108.1	35.53	298.45	2240.27	1126.08	450.81
10.7	8.7	7	0.50	0.50	0.40	19.00	3.49	109.3	25.00	304.73	652.15	327.81	379.19
10.8	8.8	7	0.50	0.50	0.40	19.00	3.49	110.6	25.00	311.01	653.98	328.73	361.32
10.9	8.9	7	0.50	0.50	0.40	19.00	3.49	111.8	25.00	317.30	655.82	329.65	519.95
11.0	9.0	7	0.50	0.50	0.40	19.00	3.48	113.1	25.00	323.58	657.65	330.57	679.82
11.1	9.1	7	0.50	0.50	0.40	19.00	3.48	114.4	25.00	329.86	659.48	331.49	840.93
11.2	9.2	7	0.50	0.50	0.40	19.00	3.48	115.6	25.00	336.14	661.31	332.41	1003.27
11.3	9.3	7	0.50	0.50	0.40	19.00	3.47	116.9	25.00	342.43	663.15	333.33	1166.85
11.4	9.4	7	0.50	0.50	0.40	19.00	3.47	118.1	25.00	348.71	664.98	334.26	1331.66
11.5	9.5	7	0.50	0.50	0.40	19.00	3.47	119.4	25.00	354.99	666.81	335.18	1497.69
11.6	9.6	7	0.50	0.50	0.40	19.00	3.46	120.6	25.00	361.28	668.65	336.10	1664.95
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	121.9	0.00	361.28	0.00	0.00	1827.97
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	123.2	0.00	361.28	0.00	0.00	2014.90
11.9	9.9	9	0.70	0.50	0.86	37.70	44.38	124.4	50.54	373.98	5216.02	2621.86	2214.15
12.0	10.0	9	0.70	0.50	0.86	37.70	44.35	125.7	50.95	386.79	5254.55	2641.23	2238.21
12.1	10.1	9	0.70	0.50	0.86	37.70	44.32	126.9	51.36	399.69	5293.00	2660.55	2262.33
12.2	10.2	9	0.70	0.50	0.86	37.70	44.29	128.2	51.77	412.71	5331.36	2679.83	2286.50
12.3	10.3	9	0.70	0.50	0.86	37.70	44.25	129.4	52.18	425.82	5369.63	2699.07	2310.73
12.4	10.4	9	0.70	0.50	0.86	37.70	44.22	130.7	52.59	439.04	5407.81	2718.26	2335.01
12.5	10.5	9	0.70	0.50	0.86	37.70	44.19	131.9	53.00	452.36	5445.90	2737.41	2162.29
12.6	10.6	9	0.70	0.50	0.86	37.70	44.15	133.2	53.41	465.79	5483.90	2756.51	1988.37
12.7	10.7	9	0.70	0.50	0.86	37.70	44.12	134.5	53.82	479.31	5521.81	2775.57	1813.26
12.8	10.8	9	0.70	0.50	0.86	37.70	44.09	135.7	54.23	492.94	5559.63	2794.58	1636.94
12.9	10.9	9	0.70	0.50	0.86	37.70	44.05	137.0	54.65	506.68	5597.36	2813.54	1459.44
13.0	11.0	9	0.70	0.50	0.86	37.70	44.02	138.2	55.06	520.52	5634.99	2832.46	1280.76
13.1	11.1	9	0.70	0.50	0.86	37.70	43.98	139.5	55.47	534.46	5672.53	2851.32	1100.88
13.2	11.2	9	0.70	0.50	0.86	37.70	43.95	140.7	55.88	548.50	5709.98	2870.15	919.83
13.3	11.3	9	0.70	0.50	0.86	37.70	43.91	142.0	56.29	562.65	5747.33	2888.92	737.60
13.4	11.4	9	0.70	0.50	0.86	37.70	43.88	143.3	56.70	576.89	5784.58	2907.65	554.19
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	144.5	0.00	576.89	0.00	0.00	357.13
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	145.8	0.00	576.89	0.00	0.00	566.55

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	147.0	0.00	576.89	0.00	0.00	777.18
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	148.3	0.00	576.89	0.00	0.00	989.03
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	149.5	0.00	576.89	0.00	0.00	1202.16
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	150.8	0.00	576.89	0.00	0.00	1416.58
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	152.1	0.00	576.89	0.00	0.00	1632.29
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	153.3	0.00	576.89	0.00	0.00	1849.28
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	154.6	0.00	576.89	0.00	0.00	2067.56
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	155.8	0.00	576.89	0.00	0.00	2287.12
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	157.1	0.00	576.89	0.00	0.00	2507.96
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	592.38	6223.90	3128.47	2743.55
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	607.97	6259.84	3146.54	2769.83
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	623.66	6295.68	3164.55	2796.27
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	639.46	6333.77	3183.70	2822.86
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	655.36	6371.82	3202.83	2849.52
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	671.36	6409.83	3221.93	2876.25
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	687.47	6447.80	3241.02	2903.06
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	703.68	6485.73	3260.09	2697.65
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	719.99	6523.62	3279.13	2491.04
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	736.40	6561.47	3298.15	2283.24
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	752.92	6599.28	3317.16	2074.25
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	769.54	6637.04	3336.14	1864.07
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	786.27	6674.77	3355.10	1652.70
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	803.09	6712.45	3374.05	1440.14
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	820.02	6750.09	3392.97	1226.40
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	837.06	6787.70	3411.87	1011.47
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	854.19	6825.26	3430.75	795.36
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	854.19	0.00	0.00	808.00
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	854.19	0.00	0.00	1052.92
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	854.19	0.00	0.00	1299.09
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	854.19	0.00	0.00	1546.52
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	184.7	0.00	854.19	0.00	0.00	1795.20
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	186.0	0.00	854.19	0.00	0.00	2045.12
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	187.2	0.00	854.19	0.00	0.00	2296.30
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	188.5	0.00	854.19	0.00	0.00	2548.72

1.1.2 Calcolo del carico limite con riferimento alla prova CPTu4

1.1.2.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.0	19.35	35		0.70	0.50	0.70
2	2.0	2.9	19.35	35		0.70	0.50	0.70
3	2.9	4.3	18.33	22	40	0.58	0.50	0.40
4	4.3	5.9	19.35	36		0.70	0.50	0.73
5	5.9	11.0	18.33	22	50	0.50	0.50	0.40
6	11.0	11.6	19.35	41		0.70	0.50	0.86
7	11.6	11.8	19.35	38		0.70	0.50	0.79
8	11.8	14.7	19.35	41		0.70	0.50	0.86
9	14.7	14.9	19.35	38		0.70	0.50	0.79
10	14.9	16.8	19.35	42		0.70	0.50	0.90
11	16.8	17.4	19.35	38		0.70	0.50	0.79
12	17.4	17.8	19.35	41		0.70	0.50	0.86
13	17.8	18.0	19.35	38		0.70	0.50	0.79

1.1.2.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	6883	6693

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.8	10.43	3.93	732.75	828.73	630.87	10.43	3.93	732.75	828.73	588.13
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	5.7	10.76	7.99	756.18	855.22	607.88	10.76	7.99	756.18	855.22	543.90
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	8.5	11.10	12.17	779.60	881.71	583.35	11.10	12.17	779.60	881.71	498.22
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	11.3	11.43	16.48	803.02	908.20	557.28	11.43	16.48	803.02	908.20	451.11
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	14.1	11.76	20.92	826.45	934.69	529.68	11.76	20.92	826.45	934.69	402.55
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	17.0	12.10	25.48	849.87	961.18	500.54	12.10	25.48	849.87	961.18	352.55
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	19.8	12.43	30.16	873.29	987.67	469.87	12.43	30.16	873.29	987.67	301.10
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	22.6	12.76	34.97	896.72	1014.16	437.67	12.76	34.97	896.72	1014.16	248.21
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	25.4	13.10	39.91	920.14	1040.66	403.93	13.10	39.91	920.14	1040.66	193.88
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	28.3	23.20	48.66	417.95	472.69	371.85	7.74	42.83	136.72	154.63	136.24
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	31.1	23.20	57.40	419.78	474.76	378.17	7.91	45.81	139.76	158.07	138.55
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	33.9	23.20	66.15	421.61	476.83	384.48	8.09	48.86	142.80	161.51	140.92
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	36.8	23.20	74.89	423.45	478.91	390.79	8.26	51.97	145.84	164.94	143.35
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	39.6	23.20	83.64	425.28	480.98	470.69	8.43	55.15	148.88	168.38	239.55
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	42.4	23.20	92.39	427.11	483.05	552.49	8.60	58.40	151.92	171.82	337.61
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	101.13	428.95	485.13	636.18	8.78	61.70	154.96	175.26	437.53
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	48.1	23.20	109.88	430.78	487.20	721.77	8.95	65.08	158.00	178.69	539.31
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	50.9	23.20	118.63	432.61	489.27	809.24	9.12	68.52	161.04	182.13	642.95
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	53.7	23.20	127.37	434.45	491.35	898.62	9.29	72.02	164.08	185.57	748.45
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	56.5	23.20	136.12	436.28	493.42	989.89	9.46	75.59	167.12	189.01	855.81
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	59.4	23.20	144.86	438.11	495.49	1083.05	9.64	79.22	170.16	192.44	965.02
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	62.2	23.20	153.61	439.94	497.56	1178.11	9.81	82.92	173.20	195.88	1076.10

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	65.0	23.20	162.36	441.78	499.64	1275.06	9.98	86.68	176.24	199.32	1189.03
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	67.9	18.36	169.28	1409.84	1594.49	1372.32	18.36	93.60	1409.84	1594.49	1306.51
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	70.7	18.71	176.33	1436.55	1624.70	1398.00	18.71	100.65	1436.55	1624.70	1332.19
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	73.5	19.06	183.52	1463.25	1654.90	1423.79	19.06	107.84	1463.25	1654.90	1357.99
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	76.3	19.40	190.83	1489.96	1685.11	1449.70	19.40	115.15	1489.96	1685.11	1383.90
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	79.2	19.75	198.28	1516.67	1715.32	1475.73	19.75	122.60	1516.67	1715.32	1409.92
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	82.0	20.10	205.85	1543.38	1745.52	1501.86	20.10	130.18	1543.38	1745.52	1436.06
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	84.8	20.45	213.56	1570.09	1775.73	1431.19	20.45	137.89	1570.09	1775.73	1340.19
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	87.7	20.80	221.40	1596.80	1805.93	1358.74	20.80	145.73	1596.80	1805.93	1242.63
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	90.5	21.14	229.37	1623.51	1836.14	1284.51	21.14	153.70	1623.51	1836.14	1143.39
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	93.3	21.49	237.48	1650.21	1866.35	1208.50	21.49	161.80	1650.21	1866.35	1042.46
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	96.1	21.84	245.71	1676.92	1896.55	1130.71	21.84	170.03	1676.92	1896.55	939.83
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	99.0	22.19	254.07	1703.63	1926.76	1051.13	22.19	178.40	1703.63	1926.76	835.52
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	101.8	22.53	262.57	1730.34	1956.97	969.78	22.53	186.89	1730.34	1956.97	729.53
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	104.6	22.88	271.20	1757.05	1987.17	886.65	22.88	195.52	1757.05	1987.17	621.84
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	107.4	23.23	279.95	1783.76	2017.38	801.73	23.23	204.28	1783.76	2017.38	512.46
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	110.3	23.58	288.84	1810.46	2047.59	715.04	23.58	213.17	1810.46	2047.59	401.40
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	113.1	25.00	298.27	564.57	638.51	626.92	13.24	218.16	233.73	264.34	285.14
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	115.9	25.00	307.69	566.40	640.59	633.82	13.41	223.21	236.76	267.77	289.25
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	118.8	25.00	317.12	568.24	642.66	640.72	13.58	228.33	239.80	271.21	293.42
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	121.6	25.00	326.54	570.07	644.73	647.63	13.75	233.51	242.84	274.65	297.65
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	124.4	25.00	335.97	571.90	646.81	654.53	13.92	238.76	245.88	278.09	301.93
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	127.2	25.00	345.39	573.74	648.88	661.43	14.10	244.08	248.92	281.52	306.27
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	130.1	25.00	354.82	575.57	650.95	668.34	14.27	249.46	251.96	284.96	310.67
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	132.9	25.00	364.24	577.40	653.03	675.24	14.44	254.90	255.00	288.40	315.12
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	135.7	25.00	373.66	579.23	655.10	682.15	14.61	260.41	258.04	291.84	319.63
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	138.5	25.00	383.09	581.07	657.17	689.05	14.78	265.98	261.08	295.27	324.20
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	392.51	582.90	659.24	695.95	14.96	271.62	264.12	298.71	328.82
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	144.2	25.00	401.94	584.73	661.32	702.86	15.13	277.33	267.16	302.15	333.50
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	147.0	25.00	411.36	586.57	663.39	709.76	15.30	283.09	270.20	305.58	338.23
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	149.9	25.00	420.79	588.40	665.46	716.66	15.47	288.93	273.24	309.02	343.02
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	152.7	25.00	430.21	590.23	667.54	723.57	15.65	294.83	276.27	312.46	347.87
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	155.5	25.00	439.64	592.07	669.61	730.47	15.82	300.79	279.31	315.90	352.78
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	158.3	25.00	449.06	593.90	671.68	737.37	15.99	306.82	282.35	319.33	357.74
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	161.2	25.00	458.49	595.73	673.76	744.28	16.16	312.91	285.39	322.77	362.75
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	164.0	25.00	467.91	597.56	675.83	751.18	16.33	319.07	288.43	326.21	367.83
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	166.8	25.00	477.34	599.40	677.90	758.09	16.51	325.29	291.47	329.65	372.96
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	169.6	25.00	486.76	601.23	679.98	764.99	16.68	331.58	294.51	333.08	378.14
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	172.5	25.00	496.19	603.06	682.05	771.89	16.85	337.93	297.55	336.52	383.38
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	175.3	25.00	505.61	604.90	684.12	778.80	17.02	344.35	300.59	339.96	388.68
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	178.1	25.00	515.04	606.73	686.19	785.70	17.19	350.83	303.63	343.40	394.04
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	181.0	25.00	524.46	608.56	688.27	792.60	17.37	357.38	306.67	346.83	399.45
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	183.8	25.00	533.89	610.40	690.34	799.51	17.54	363.99	309.71	350.27	404.92
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	186.6	25.00	543.31	612.23	692.41	806.41	17.71	370.67	312.75	353.71	410.44
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	189.4	25.00	552.74	614.06	694.49	813.31	17.88	377.41	315.79	357.15	416.02
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	192.3	25.00	562.16	615.89	696.56	820.22	18.06	384.21	318.82	360.58	421.66
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	195.1	25.00	571.59	617.73	698.63	827.12	18.23	391.09	321.86	364.02	427.36

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	197.9	25.00	581.01	619.56	700.71	834.03	18.40	398.02	324.90	367.46	433.11
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	200.7	25.00	590.43	621.39	702.78	840.93	18.57	405.02	327.94	370.89	438.91
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	203.6	25.00	599.86	623.23	704.85	847.83	18.74	412.09	330.98	374.33	444.78
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	206.4	25.00	609.28	625.06	706.93	854.74	18.92	419.22	334.02	377.77	450.70
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	209.2	25.00	618.71	626.89	709.00	861.64	19.09	426.42	337.06	381.21	456.67
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	212.1	25.00	628.13	628.73	711.07	868.54	19.26	433.68	340.10	384.64	462.71
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	214.9	25.00	637.56	630.56	713.14	875.45	19.43	441.00	343.14	388.08	468.79
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	217.7	25.00	646.98	632.39	715.22	882.35	19.60	448.39	346.18	391.52	474.94
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	220.5	25.00	656.41	634.22	717.29	889.25	19.78	455.85	349.22	394.96	481.14
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	223.4	25.00	665.83	636.06	719.36	896.16	19.95	463.37	352.26	398.39	487.40
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	226.2	25.00	675.26	637.89	721.44	903.06	20.12	470.95	355.30	401.83	493.71
10.1	8.1	5	0.50	0.50	0.40	19.00	3.57	229.0	25.00	684.68	639.72	723.51	1236.81	20.29	478.60	358.34	405.27	847.45
10.2	8.2	5	0.50	0.50	0.40	19.00	3.57	231.8	25.00	694.11	641.56	725.58	1573.72	20.46	486.32	361.37	408.71	1204.30
10.3	8.3	5	0.50	0.50	0.40	19.00	3.57	234.7	25.00	703.53	643.39	727.66	1913.79	20.64	494.10	364.41	412.14	1564.27
10.4	8.4	5	0.50	0.50	0.40	19.00	3.57	237.5	25.00	712.96	645.22	729.73	2257.02	20.81	501.94	367.45	415.58	1927.37
10.5	8.5	5	0.50	0.50	0.40	19.00	3.57	240.3	25.00	722.38	647.06	731.80	2603.40	20.98	509.85	370.49	419.02	2293.59
10.6	8.6	5	0.50	0.50	0.40	19.00	3.57	243.2	25.00	731.81	648.89	733.88	2952.94	21.15	517.83	373.53	422.45	2662.93
10.7	8.7	5	0.50	0.50	0.40	19.00	3.57	246.0	25.00	741.23	650.72	735.95	3222.85	21.33	525.87	376.57	425.89	2952.61
10.8	8.8	5	0.50	0.50	0.40	19.00	3.57	248.8	25.00	750.66	652.55	738.02	3495.11	21.50	533.97	379.61	429.33	3244.60
10.9	8.9	5	0.50	0.50	0.40	19.00	3.57	251.6	25.00	760.08	654.39	740.09	3853.68	21.67	542.14	382.65	432.77	3622.86
11.0	9.0	5	0.50	0.50	0.40	19.00	3.57	254.5	25.00	769.51	656.22	742.17	4215.24	21.84	550.38	385.69	436.20	4004.09
11.1	9.1	6	0.70	0.50	0.86	37.70	45.38	257.3	46.91	787.19	4949.67	5597.95	4586.99	46.91	568.06	4949.67	5597.95	4396.44
11.2	9.2	6	0.70	0.50	0.86	37.70	45.38	260.1	47.32	805.03	4992.96	5646.91	4635.02	47.32	585.90	4992.96	5646.91	4444.47
11.3	9.3	6	0.70	0.50	0.86	37.70	45.38	263.0	47.73	823.02	5036.25	5695.87	4683.02	47.73	603.89	5036.25	5695.87	4492.47
11.4	9.4	6	0.70	0.50	0.86	37.70	45.38	265.8	48.14	841.17	5079.55	5744.83	4730.98	48.14	622.04	5079.55	5744.83	4540.44
11.5	9.5	6	0.70	0.50	0.86	37.70	45.38	268.6	48.55	859.47	5122.84	5793.79	4778.91	48.55	640.34	5122.84	5793.79	4588.36
11.6	9.6	6	0.70	0.50	0.86	37.70	45.38	271.4	48.96	877.93	5166.13	5842.75	4826.80	48.96	658.80	5166.13	5842.75	4636.25
11.7	9.7	7	0.70	0.50	0.79	35.40	35.91	274.3	45.49	895.08	4122.44	4662.37	4873.37	45.49	675.95	4122.44	4662.37	4682.82
11.8	9.8	7	0.70	0.50	0.79	35.40	35.90	277.1	45.87	912.38	4155.08	4699.29	5002.67	45.87	693.25	4155.08	4699.29	4812.12
11.9	9.9	8	0.70	0.50	0.86	37.70	45.33	279.9	50.19	931.30	5290.13	5983.00	5134.00	50.19	712.17	5290.13	5983.00	4943.46
12.0	10.0	8	0.70	0.50	0.86	37.70	45.31	282.7	50.60	950.37	5331.38	6029.65	5182.14	50.60	731.24	5331.38	6029.65	4991.59
12.1	10.1	8	0.70	0.50	0.86	37.70	45.29	285.6	51.01	969.61	5372.59	6076.25	5230.38	51.01	750.47	5372.59	6076.25	5039.83
12.2	10.2	8	0.70	0.50	0.86	37.70	45.28	288.4	51.42	988.99	5413.75	6122.81	5278.71	51.42	769.86	5413.75	6122.81	5088.16
12.3	10.3	8	0.70	0.50	0.86	37.70	45.26	291.2	51.83	1008.53	5454.88	6169.32	5327.14	51.83	789.40	5454.88	6169.32	5136.59
12.4	10.4	8	0.70	0.50	0.86	37.70	45.24	294.1	52.24	1028.23	5495.95	6215.78	5375.66	52.24	809.10	5495.95	6215.78	5185.11
12.5	10.5	8	0.70	0.50	0.86	37.70	45.23	296.9	52.65	1048.08	5536.99	6262.19	5424.29	52.65	828.95	5536.99	6262.19	5233.74
12.6	10.6	8	0.70	0.50	0.86	37.70	45.21	299.7	53.06	1068.08	5577.98	6308.55	5473.01	53.06	848.95	5577.98	6308.55	5282.46
12.7	10.7	8	0.70	0.50	0.86	37.70	45.19	302.5	53.47	1088.24	5618.92	6354.85	5521.82	53.47	869.11	5618.92	6354.85	5331.27
12.8	10.8	8	0.70	0.50	0.86	37.70	45.17	305.4	53.88	1108.55	5659.83	6401.11	5570.73	53.88	889.42	5659.83	6401.11	5380.19
12.9	10.9	8	0.70	0.50	0.86	37.70	45.16	308.2	54.29	1129.02	5700.68	6447.32	5619.74	54.29	909.89	5700.68	6447.32	5429.19
13.0	11.0	8	0.70	0.50	0.86	37.70	45.14	311.0	54.70	1149.65	5741.50	6493.48	5668.85	54.70	930.52	5741.50	6493.48	5478.30
13.1	11.1	8	0.70	0.50	0.86	37.70	45.12	313.8	55.11	1170.42	5782.26	6539.59	5718.04	55.11	951.29	5782.26	6539.59	5527.50
13.2	11.2	8	0.70	0.50	0.86	37.70	45.10	316.7	55.53	1191.36	5822.99	6585.64	5767.34	55.53	972.23	5822.99	6585.64	5576.79
13.3	11.3	8	0.70	0.50	0.86	37.70	45.08	319.5	55.94	1212.44	5863.66	6631.64	5816.73	55.94	993.31	5863.66	6631.64	5626.18
13.4	11.4	8	0.70	0.50	0.86	37.70	45.07	322.3	56.35	1233.68	5904.29	6677.60	5866.21	56.35	1014.55	5904.29	6677.60	5675.66
13.5	11.5	8	0.70	0.50	0.86	37.70	45.05	325.2	56.76	1255.08	5944.87	6723.49	5915.79	56.76	1035.95	5944.87	6723.49	5725.24
13.6	11.6	8	0.70	0.50	0.86	37.70	45.03	328.0	57.17	1276.63	5985.41	6769.34	5965.46	57.17	1057.50	5985.41	6769.34	5774.92

13.7	11.7	8	0.70	0.50	0.86	37.70	45.01	330.8	57.58	1298.34	6025.90	6815.13	6015.23	57.58	1079.21	6025.90	6815.13	5824.68
13.8	11.8	8	0.70	0.50	0.86	37.70	44.99	333.6	57.99	1320.20	6066.34	6860.87	5962.23	57.99	1101.07	6066.34	6860.87	5771.68
13.9	11.9	8	0.70	0.50	0.86	37.70	44.97	336.5	58.40	1342.21	6106.74	6906.56	5908.67	58.40	1123.08	6106.74	6906.56	5718.13
14.0	12.0	8	0.70	0.50	0.86	37.70	44.95	339.3	58.81	1364.38	6147.09	6952.19	6017.72	58.81	1145.25	6147.09	6952.19	5827.18
14.1	12.1	8	0.70	0.50	0.86	37.70	44.94	342.1	59.22	1386.71	6187.39	6997.77	6127.23	59.22	1167.58	6187.39	6997.77	5936.68
14.2	12.2	8	0.70	0.50	0.86	37.70	44.92	344.9	59.63	1409.19	6227.64	7043.29	6237.19	59.63	1190.06	6227.64	7043.29	6046.64
14.3	12.3	8	0.70	0.50	0.86	37.70	44.90	347.8	60.04	1431.82	6267.84	7088.76	6347.61	60.04	1212.69	6267.84	7088.76	6157.06
14.4	12.4	8	0.70	0.50	0.86	37.70	44.88	350.6	60.45	1454.61	6307.99	7134.17	6458.48	60.45	1235.48	6307.99	7134.17	6267.93
14.5	12.5	8	0.70	0.50	0.86	37.70	44.86	353.4	60.86	1477.55	6348.10	7179.53	6569.81	60.86	1258.42	6348.10	7179.53	6379.26
14.6	12.6	8	0.70	0.50	0.86	37.70	44.84	356.3	61.27	1500.65	6388.15	7224.83	6681.59	61.27	1281.52	6388.15	7224.83	6491.04
14.7	12.7	8	0.70	0.50	0.86	37.70	44.82	359.1	61.68	1523.90	6428.16	7270.08	6793.82	61.68	1304.77	6428.16	7270.08	6603.27
14.8	12.8	9	0.70	0.50	0.79	35.40	35.45	361.9	57.21	1545.47	5117.48	5787.73	6904.91	57.21	1326.34	5117.48	5787.73	6714.36
14.9	12.9	9	0.70	0.50	0.79	35.40	35.43	364.7	57.59	1567.19	5148.96	5823.33	7119.30	57.59	1348.05	5148.96	5823.33	6928.75
15.0	13.0	10	0.70	0.50	0.90	38.85	50.06	367.6	65.51	1591.88	7322.58	8281.65	7337.24	65.51	1372.75	7322.58	8281.65	7146.70
15.1	13.1	10	0.70	0.50	0.90	38.85	50.04	370.4	65.94	1616.74	7367.16	8332.06	7393.14	65.94	1397.61	7367.16	8332.06	7202.59
15.2	13.2	10	0.70	0.50	0.90	38.85	50.02	373.2	66.36	1641.76	7411.68	8382.42	7449.12	66.36	1422.63	7411.68	8382.42	7258.57
15.3	13.3	10	0.70	0.50	0.90	38.85	49.99	376.0	66.79	1666.94	7456.15	8432.71	7505.20	66.79	1447.81	7456.15	8432.71	7314.65
15.4	13.4	10	0.70	0.50	0.90	38.85	49.97	378.9	67.22	1692.28	7500.56	8482.93	7561.36	67.22	1473.15	7500.56	8482.93	7370.81
15.5	13.5	10	0.70	0.50	0.90	38.85	49.95	381.7	67.65	1717.78	7544.91	8533.09	7617.62	67.65	1498.65	7544.91	8533.09	7427.07
15.6	13.6	10	0.70	0.50	0.90	38.85	49.93	384.5	68.07	1743.44	7589.20	8583.18	7673.97	68.07	1524.31	7589.20	8583.18	7483.42
15.7	13.7	10	0.70	0.50	0.90	38.85	49.91	387.4	68.50	1769.27	7633.43	8633.21	7730.41	68.50	1550.14	7633.43	8633.21	7539.86
15.8	13.8	10	0.70	0.50	0.90	38.85	49.88	390.2	68.93	1795.25	7677.61	8683.17	7786.93	68.93	1576.12	7677.61	8683.17	7596.38
15.9	13.9	10	0.70	0.50	0.90	38.85	49.86	393.0	69.35	1821.40	7721.73	8733.07	7661.53	69.35	1602.27	7721.73	8733.07	7470.98
16.0	14.0	10	0.70	0.50	0.90	38.85	49.84	395.8	69.78	1847.71	7765.79	8782.90	7535.23	69.78	1628.58	7765.79	8782.90	7344.68
16.1	14.1	10	0.70	0.50	0.90	38.85	49.82	398.7	70.21	1874.17	7809.79	8832.66	7408.04	70.21	1655.04	7809.79	8832.66	7217.49
16.2	14.2	10	0.70	0.50	0.90	38.85	49.79	401.5	70.64	1900.80	7853.73	8882.35	7279.96	70.64	1681.67	7853.73	8882.35	7089.41
16.3	14.3	10	0.70	0.50	0.90	38.85	49.77	404.3	71.06	1927.59	7897.60	8931.98	7150.99	71.06	1708.46	7897.60	8931.98	6960.44
16.4	14.4	10	0.70	0.50	0.90	38.85	49.75	407.2	71.49	1954.55	7941.42	8981.54	7021.13	71.49	1735.41	7941.42	8981.54	6830.58
16.5	14.5	10	0.70	0.50	0.90	38.85	49.72	410.0	71.92	1981.66	7985.18	9031.03	7010.32	71.92	1762.53	7985.18	9031.03	6819.77
16.6	14.6	10	0.70	0.50	0.90	38.85	49.70	412.8	72.35	2008.93	8028.88	9080.45	6999.24	72.35	1789.80	8028.88	9080.45	6808.69
16.7	14.7	10	0.70	0.50	0.90	38.85	49.68	415.6	72.77	2036.37	8072.52	9129.80	6987.89	72.77	1817.24	8072.52	9129.80	6797.34
16.8	14.8	10	0.70	0.50	0.90	38.85	49.65	418.5	73.20	2063.96	8116.09	9179.08	6976.28	73.20	1844.83	8116.09	9179.08	6785.73
16.9	14.9	11	0.70	0.50	0.79	35.40	35.09	421.3	65.15	2088.52	5769.58	6525.24	6839.22	65.15	1869.39	5769.58	6525.24	6648.67
17.0	15.0	11	0.70	0.50	0.79	35.40	35.08	424.1	65.53	2113.23	5800.15	6559.82	6883.29	65.53	1894.10	5800.15	6559.82	6692.74

1.1.2.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	4971	4813

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.0	10.43	3.28	732.75	575.50	438.58	10.43	3.28	732.75	575.50	408.90
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	3.9	10.76	6.66	756.18	593.90	423.10	10.76	6.66	756.18	593.90	378.67
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	5.9	11.10	10.14	779.60	612.30	406.57	11.10	10.14	779.60	612.30	347.46
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	7.9	11.43	13.73	803.02	630.69	388.99	11.43	13.73	803.02	630.69	315.26
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	9.8	11.76	17.43	826.45	649.09	370.36	11.76	17.43	826.45	649.09	282.07
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	11.8	12.10	21.23	849.87	667.49	350.68	12.10	21.23	849.87	667.49	247.90
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	13.7	12.43	25.13	873.29	685.88	329.94	12.43	25.13	873.29	685.88	212.74
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	15.7	12.76	29.14	896.72	704.28	308.16	12.76	29.14	896.72	704.28	176.59
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	17.7	13.10	33.26	920.14	722.68	285.32	13.10	33.26	920.14	722.68	139.46
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	19.6	23.20	40.55	417.95	328.26	264.11	7.74	35.69	136.72	107.38	99.78
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	21.6	23.20	47.84	419.78	329.70	269.55	7.91	38.18	139.76	109.77	101.75
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	23.6	23.20	55.12	421.61	331.13	274.99	8.09	40.72	142.80	112.16	103.77
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	25.5	23.20	62.41	423.45	332.57	280.43	8.26	43.31	145.84	114.54	105.83
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	27.5	23.20	69.70	425.28	334.01	336.97	8.43	45.96	148.88	116.93	173.02
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	29.5	23.20	76.99	427.11	335.45	394.83	8.60	48.66	151.92	119.32	241.51
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	31.4	23.20	84.28	428.95	336.89	454.01	8.78	51.42	154.96	121.71	311.30
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	33.4	23.20	91.57	430.78	338.33	514.50	8.95	54.23	158.00	124.09	382.38
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	35.3	23.20	98.85	432.61	339.77	576.30	9.12	57.10	161.04	126.48	454.77
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	37.3	23.20	106.14	434.45	341.21	639.42	9.29	60.02	164.08	128.87	528.45
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	39.3	23.20	113.43	436.28	342.65	703.86	9.46	62.99	167.12	131.25	603.44
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	41.2	23.20	120.72	438.11	344.09	769.61	9.64	66.02	170.16	133.64	679.72
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	43.2	23.20	128.01	439.94	345.53	836.68	9.81	69.10	173.20	136.03	757.30

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	135.30	441.78	346.97	905.07	9.98	72.23	176.24	138.42	836.18
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	47.1	18.36	141.07	1409.84	1107.28	973.44	18.36	78.00	1409.84	1107.28	918.61
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	49.1	18.71	146.94	1436.55	1128.26	992.13	18.71	83.88	1436.55	1128.26	937.29
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	51.1	19.06	152.93	1463.25	1149.24	1010.91	19.06	89.87	1463.25	1149.24	956.07
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	53.0	19.40	159.03	1489.96	1170.21	1029.79	19.40	95.96	1489.96	1170.21	974.95
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	55.0	19.75	165.23	1516.67	1191.19	1048.76	19.75	102.17	1516.67	1191.19	993.92
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	56.9	20.10	171.55	1543.38	1212.17	1067.82	20.10	108.48	1543.38	1212.17	1012.98
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	58.9	20.45	177.97	1570.09	1233.14	1019.68	20.45	114.91	1570.09	1233.14	947.34
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	60.9	20.80	184.50	1596.80	1254.12	970.31	20.80	121.44	1596.80	1254.12	880.54
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	62.8	21.14	191.14	1623.51	1275.10	919.72	21.14	128.08	1623.51	1275.10	812.58
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	64.8	21.49	197.90	1650.21	1296.08	867.92	21.49	134.83	1650.21	1296.08	743.47
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	66.8	21.84	204.76	1676.92	1317.05	814.89	21.84	141.69	1676.92	1317.05	673.20
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	68.7	22.19	211.73	1703.63	1338.03	760.64	22.19	148.66	1703.63	1338.03	601.77
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	70.7	22.53	218.81	1730.34	1359.01	705.17	22.53	155.74	1730.34	1359.01	529.19
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	72.6	22.88	226.00	1757.05	1379.98	648.48	22.88	162.93	1757.05	1379.98	455.45
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	74.6	23.23	233.29	1783.76	1400.96	590.57	23.23	170.23	1783.76	1400.96	380.55
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	76.6	23.58	240.70	1810.46	1421.94	531.44	23.58	177.64	1810.46	1421.94	304.49
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	78.5	25.00	248.56	564.57	443.41	471.38	13.24	181.80	233.73	183.57	224.36
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	80.5	25.00	256.41	566.40	444.85	477.31	13.41	186.01	236.76	185.95	227.83
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	82.5	25.00	264.26	568.24	446.29	483.25	13.58	190.27	239.80	188.34	231.34
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	84.4	25.00	272.12	570.07	447.73	489.18	13.75	194.59	242.84	190.73	234.90
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	86.4	25.00	279.97	571.90	449.17	495.11	13.92	198.97	245.88	193.12	238.51
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	88.4	25.00	287.83	573.74	450.61	501.04	14.10	203.40	248.92	195.50	242.17
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	90.3	25.00	295.68	575.57	452.05	506.98	14.27	207.88	251.96	197.89	245.87
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	92.3	25.00	303.53	577.40	453.49	512.91	14.44	212.42	255.00	200.28	249.62
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	94.2	25.00	311.39	579.23	454.93	518.84	14.61	217.01	258.04	202.66	253.42
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	96.2	25.00	319.24	581.07	456.37	524.77	14.78	221.65	261.08	205.05	257.26
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	98.2	25.00	327.10	582.90	457.81	530.71	14.96	226.35	264.12	207.44	261.15
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	100.1	25.00	334.95	584.73	459.25	536.64	15.13	231.10	267.16	209.82	265.09
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	102.1	25.00	342.80	586.57	460.69	542.57	15.30	235.91	270.20	212.21	269.07
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	104.1	25.00	350.66	588.40	462.13	548.50	15.47	240.77	273.24	214.60	273.11
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	106.0	25.00	358.51	590.23	463.57	554.44	15.65	245.69	276.27	216.99	277.18
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	108.0	25.00	366.37	592.07	465.01	560.37	15.82	250.66	279.31	219.37	281.31
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	110.0	25.00	374.22	593.90	466.45	566.30	15.99	255.68	282.35	221.76	285.48
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	111.9	25.00	382.07	595.73	467.89	572.23	16.16	260.76	285.39	224.15	289.70
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	113.9	25.00	389.93	597.56	469.33	578.17	16.33	265.89	288.43	226.53	293.97
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	115.8	25.00	397.78	599.40	470.77	584.10	16.51	271.07	291.47	228.92	298.28
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	117.8	25.00	405.64	601.23	472.20	590.03	16.68	276.31	294.51	231.31	302.64
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	119.8	25.00	413.49	603.06	473.64	595.96	16.85	281.61	297.55	233.70	307.05
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	121.7	25.00	421.34	604.90	475.08	601.89	17.02	286.96	300.59	236.08	311.51
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	123.7	25.00	429.20	606.73	476.52	607.83	17.19	292.36	303.63	238.47	316.01
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	125.7	25.00	437.05	608.56	477.96	613.76	17.37	297.81	306.67	240.86	320.56
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	127.6	25.00	444.91	610.40	479.40	619.69	17.54	303.32	309.71	243.24	325.15
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	129.6	25.00	452.76	612.23	480.84	625.62	17.71	308.89	312.75	245.63	329.80
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	131.6	25.00	460.61	614.06	482.28	631.56	17.88	314.51	315.79	248.02	334.49
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	133.5	25.00	468.47	615.89	483.72	637.49	18.06	320.18	318.82	250.40	339.22
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	135.5	25.00	476.32	617.73	485.16	643.42	18.23	325.90	321.86	252.79	344.01

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	137.4	25.00	484.18	619.56	486.60	649.35	18.40	331.68	324.90	255.18	348.84
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	139.4	25.00	492.03	621.39	488.04	655.29	18.57	337.52	327.94	257.57	353.70
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	499.88	623.23	489.48	661.22	18.74	343.41	330.98	259.95	358.60
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	143.3	25.00	507.74	625.06	490.92	667.15	18.92	349.35	334.02	262.34	363.54
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	145.3	25.00	515.59	626.89	492.36	673.08	19.09	355.35	337.06	264.73	368.50
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	147.3	25.00	523.44	628.73	493.80	679.02	19.26	361.40	340.10	267.11	373.50
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	149.2	25.00	531.30	630.56	495.24	684.95	19.43	367.50	343.14	269.50	378.53
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	151.2	25.00	539.15	632.39	496.68	690.88	19.60	373.66	346.18	271.89	383.60
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	153.2	25.00	547.01	634.22	498.12	696.81	19.78	379.87	349.22	274.27	388.69
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	155.1	25.00	554.86	636.06	499.56	702.75	19.95	386.14	352.26	276.66	393.82
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	157.1	25.00	562.71	637.89	501.00	708.68	20.12	392.46	355.30	279.05	398.98
10.1	8.1	5	0.50	0.50	0.40	19.00	3.56	159.0	25.00	570.57	639.72	502.44	940.28	20.29	398.84	358.09	281.24	644.24
10.2	8.2	5	0.50	0.50	0.40	19.00	3.56	161.0	25.00	578.42	641.56	503.88	1173.94	20.46	405.27	360.88	283.44	891.56
10.3	8.3	5	0.50	0.50	0.40	19.00	3.56	163.0	25.00	586.28	643.39	505.32	1409.65	20.64	411.75	363.67	285.62	1140.92
10.4	8.4	5	0.50	0.50	0.40	19.00	3.56	164.9	25.00	594.13	645.22	506.76	1647.41	20.81	418.29	366.45	287.81	1392.33
10.5	8.5	5	0.50	0.50	0.40	19.00	3.56	166.9	25.00	601.98	647.06	508.20	1887.22	20.98	424.88	369.22	289.99	1645.78
10.6	8.6	5	0.50	0.50	0.40	19.00	3.55	168.9	25.00	609.84	648.89	509.64	2129.07	21.15	431.52	371.99	292.16	1901.28
10.7	8.7	5	0.50	0.50	0.40	19.00	3.55	170.8	25.00	617.69	650.72	511.08	2315.93	21.33	438.22	374.76	294.33	2101.79
10.8	8.8	5	0.50	0.50	0.40	19.00	3.55	172.8	25.00	625.55	652.55	512.51	2504.38	21.50	444.98	377.52	296.50	2303.87
10.9	8.9	5	0.50	0.50	0.40	19.00	3.55	174.8	25.00	633.40	654.39	513.95	2752.36	21.67	451.78	380.27	298.67	2565.48
11.0	9.0	5	0.50	0.50	0.40	19.00	3.54	176.7	25.00	641.25	656.22	515.39	3002.36	21.84	458.65	383.02	300.83	2829.12
11.1	9.1	6	0.70	0.50	0.86	37.70	45.15	178.7	46.91	655.99	4924.89	3868.00	3260.38	46.91	473.38	4924.89	3868.00	3101.59
11.2	9.2	6	0.70	0.50	0.86	37.70	45.13	180.6	47.32	670.86	4965.61	3899.98	3294.87	47.32	488.25	4965.61	3899.98	3136.08
11.3	9.3	6	0.70	0.50	0.86	37.70	45.11	182.6	47.73	685.85	5006.27	3931.92	3329.44	47.73	503.24	5006.27	3931.92	3170.65
11.4	9.4	6	0.70	0.50	0.86	37.70	45.09	184.6	48.14	700.98	5046.88	3963.81	3364.08	48.14	518.37	5046.88	3963.81	3205.29
11.5	9.5	6	0.70	0.50	0.86	37.70	45.07	186.5	48.55	716.23	5087.44	3995.66	3398.81	48.55	533.62	5087.44	3995.66	3240.02
11.6	9.6	6	0.70	0.50	0.86	37.70	45.04	188.5	48.96	731.61	5127.93	4027.47	3433.61	48.96	549.00	5127.93	4027.47	3274.82
11.7	9.7	7	0.70	0.50	0.79	35.40	35.63	190.5	45.49	745.90	4090.01	3212.28	3467.44	45.49	563.29	4090.01	3212.28	3308.65
11.8	9.8	7	0.70	0.50	0.79	35.40	35.61	192.4	45.87	760.31	4121.88	3237.31	3558.36	45.87	577.70	4121.88	3237.31	3399.57
11.9	9.9	8	0.70	0.50	0.86	37.70	44.98	194.4	50.19	776.08	5249.08	4122.62	3650.89	50.19	593.47	5249.08	4122.62	3492.10
12.0	10.0	8	0.70	0.50	0.86	37.70	44.95	196.3	50.60	791.98	5289.35	4154.25	3686.00	50.60	609.37	5289.35	4154.25	3527.21
12.1	10.1	8	0.70	0.50	0.86	37.70	44.93	198.3	51.01	808.00	5329.57	4185.83	3721.19	51.01	625.40	5329.57	4185.83	3562.40
12.2	10.2	8	0.70	0.50	0.86	37.70	44.91	200.3	51.42	824.16	5369.72	4217.37	3756.46	51.42	641.55	5369.72	4217.37	3597.67
12.3	10.3	8	0.70	0.50	0.86	37.70	44.89	202.2	51.83	840.44	5409.81	4248.86	3791.81	51.83	657.83	5409.81	4248.86	3633.02
12.4	10.4	8	0.70	0.50	0.86	37.70	44.86	204.2	52.24	856.86	5449.85	4280.30	3827.23	52.24	674.25	5449.85	4280.30	3668.44
12.5	10.5	8	0.70	0.50	0.86	37.70	44.84	206.2	52.65	873.40	5489.82	4311.69	3862.73	52.65	690.79	5489.82	4311.69	3703.94
12.6	10.6	8	0.70	0.50	0.86	37.70	44.82	208.1	53.06	890.07	5529.74	4343.04	3898.30	53.06	707.46	5529.74	4343.04	3739.51
12.7	10.7	8	0.70	0.50	0.86	37.70	44.79	210.1	53.47	906.87	5569.59	4374.35	3933.95	53.47	724.26	5569.59	4374.35	3775.16
12.8	10.8	8	0.70	0.50	0.86	37.70	44.77	212.1	53.88	923.79	5609.38	4405.60	3969.68	53.88	741.19	5609.38	4405.60	3810.89
12.9	10.9	8	0.70	0.50	0.86	37.70	44.75	214.0	54.29	940.85	5649.11	4436.80	4005.48	54.29	758.24	5649.11	4436.80	3846.69
13.0	11.0	8	0.70	0.50	0.86	37.70	44.72	216.0	54.70	958.04	5688.78	4467.96	4041.35	54.70	775.43	5688.78	4467.96	3882.56
13.1	11.1	8	0.70	0.50	0.86	37.70	44.70	217.9	55.11	975.35	5728.39	4499.07	4077.30	55.11	792.74	5728.39	4499.07	3918.51
13.2	11.2	8	0.70	0.50	0.86	37.70	44.68	219.9	55.53	992.80	5767.94	4530.13	4113.33	55.53	810.19	5767.94	4530.13	3954.54
13.3	11.3	8	0.70	0.50	0.86	37.70	44.65	221.9	55.94	1010.37	5807.42	4561.14	4149.43	55.94	827.76	5807.42	4561.14	3990.64
13.4	11.4	8	0.70	0.50	0.86	37.70	44.63	223.8	56.35	1028.07	5846.84	4592.10	4185.60	56.35	845.46	5846.84	4592.10	4026.81
13.5	11.5	8	0.70	0.50	0.86	37.70	44.60	225.8	56.76	1045.90	5886.19	4623.01	4221.85	56.76	863.29	5886.19	4623.01	4063.06
13.6	11.6	8	0.70	0.50	0.86	37.70	44.58	227.8	57.17	1063.86	5925.48	4653.86	4258.17	57.17	881.25	5925.48	4653.86	4099.38

13.7	11.7	8	0.70	0.50	0.86	37.70	44.55	229.7	57.58	1081.95	5964.71	4684.67	4294.56	57.58	899.34	5964.71	4684.67	4135.77
13.8	11.8	8	0.70	0.50	0.86	37.70	44.53	231.7	57.99	1100.17	6003.87	4715.43	4260.31	57.99	917.56	6003.87	4715.43	4101.52
13.9	11.9	8	0.70	0.50	0.86	37.70	44.50	233.7	58.40	1118.51	6042.97	4746.13	4225.70	58.40	935.90	6042.97	4746.13	4066.91
14.0	12.0	8	0.70	0.50	0.86	37.70	44.48	235.6	58.81	1136.99	6082.00	4776.79	4302.88	58.81	954.38	6082.00	4776.79	4144.09
14.1	12.1	8	0.70	0.50	0.86	37.70	44.45	237.6	59.22	1155.59	6120.96	4807.39	4380.37	59.22	972.98	6120.96	4807.39	4221.58
14.2	12.2	8	0.70	0.50	0.86	37.70	44.43	239.5	59.63	1174.32	6159.86	4837.94	4458.17	59.63	991.71	6159.86	4837.94	4299.38
14.3	12.3	8	0.70	0.50	0.86	37.70	44.40	241.5	60.04	1193.18	6198.68	4868.44	4536.30	60.04	1010.58	6198.68	4868.44	4377.51
14.4	12.4	8	0.70	0.50	0.86	37.70	44.38	243.5	60.45	1212.18	6237.45	4898.88	4614.73	60.45	1029.57	6237.45	4898.88	4455.94
14.5	12.5	8	0.70	0.50	0.86	37.70	44.35	245.4	60.86	1231.29	6276.14	4929.27	4693.48	60.86	1048.69	6276.14	4929.27	4534.69
14.6	12.6	8	0.70	0.50	0.86	37.70	44.33	247.4	61.27	1250.54	6314.76	4959.60	4772.55	61.27	1067.93	6314.76	4959.60	4613.76
14.7	12.7	8	0.70	0.50	0.86	37.70	44.30	249.4	61.68	1269.92	6353.32	4989.89	4851.92	61.68	1087.31	6353.32	4989.89	4693.13
14.8	12.8	9	0.70	0.50	0.79	35.40	35.01	251.3	57.21	1287.89	5054.73	3969.98	4930.28	57.21	1105.29	5054.73	3969.98	4771.49
14.9	12.9	9	0.70	0.50	0.79	35.40	34.99	253.3	57.59	1305.99	5085.00	3993.75	5079.65	57.59	1123.38	5085.00	3993.75	4920.86
15.0	13.0	10	0.70	0.50	0.90	38.85	49.46	255.3	65.51	1326.57	7235.54	5682.78	5231.81	65.51	1143.96	7235.54	5682.78	5073.02
15.1	13.1	10	0.70	0.50	0.90	38.85	49.43	257.2	65.94	1347.28	7278.43	5716.46	5272.58	65.94	1164.67	7278.43	5716.46	5113.79
15.2	13.2	10	0.70	0.50	0.90	38.85	49.41	259.2	66.36	1368.13	7321.24	5750.09	5313.42	66.36	1185.52	7321.24	5750.09	5154.63
15.3	13.3	10	0.70	0.50	0.90	38.85	49.38	261.1	66.79	1389.11	7363.97	5783.65	5354.33	66.79	1206.51	7363.97	5783.65	5195.54
15.4	13.4	10	0.70	0.50	0.90	38.85	49.35	263.1	67.22	1410.23	7406.62	5817.15	5395.30	67.22	1227.62	7406.62	5817.15	5236.51
15.5	13.5	10	0.70	0.50	0.90	38.85	49.32	265.1	67.65	1431.48	7449.19	5850.58	5436.35	67.65	1248.88	7449.19	5850.58	5277.56
15.6	13.6	10	0.70	0.50	0.90	38.85	49.29	267.0	68.07	1452.87	7491.69	5883.96	5477.46	68.07	1270.26	7491.69	5883.96	5318.67
15.7	13.7	10	0.70	0.50	0.90	38.85	49.26	269.0	68.50	1474.39	7534.10	5917.27	5518.64	68.50	1291.78	7534.10	5917.27	5359.85
15.8	13.8	10	0.70	0.50	0.90	38.85	49.23	271.0	68.93	1496.04	7576.42	5950.51	5559.89	68.93	1313.44	7576.42	5950.51	5401.10
15.9	13.9	10	0.70	0.50	0.90	38.85	49.20	272.9	69.35	1517.83	7618.67	5983.69	5476.47	69.35	1335.22	7618.67	5983.69	5317.68
16.0	14.0	10	0.70	0.50	0.90	38.85	49.16	274.9	69.78	1539.75	7660.84	6016.81	5392.46	69.78	1357.15	7660.84	6016.81	5233.67
16.1	14.1	10	0.70	0.50	0.90	38.85	49.13	276.9	70.21	1561.81	7702.92	6049.86	5307.87	70.21	1379.20	7702.92	6049.86	5149.08
16.2	14.2	10	0.70	0.50	0.90	38.85	49.10	278.8	70.64	1584.00	7744.91	6082.84	5222.69	70.64	1401.39	7744.91	6082.84	5063.90
16.3	14.3	10	0.70	0.50	0.90	38.85	49.07	280.8	71.06	1606.33	7786.83	6115.76	5136.94	71.06	1423.72	7786.83	6115.76	4978.15
16.4	14.4	10	0.70	0.50	0.90	38.85	49.04	282.7	71.49	1628.79	7828.65	6148.61	5050.61	71.49	1446.18	7828.65	6148.61	4891.82
16.5	14.5	10	0.70	0.50	0.90	38.85	49.01	284.7	71.92	1651.38	7870.40	6181.39	5045.78	71.92	1468.77	7870.40	6181.39	4886.99
16.6	14.6	10	0.70	0.50	0.90	38.85	48.98	286.7	72.35	1674.11	7912.05	6214.11	5040.79	72.35	1491.50	7912.05	6214.11	4882.00
16.7	14.7	10	0.70	0.50	0.90	38.85	48.95	288.6	72.77	1696.97	7953.62	6246.76	5035.63	72.77	1514.36	7953.62	6246.76	4876.84
16.8	14.8	10	0.70	0.50	0.90	38.85	48.91	290.6	73.20	1719.97	7995.11	6279.34	5030.30	73.20	1537.36	7995.11	6279.34	4871.51
16.9	14.9	11	0.70	0.50	0.79	35.40	34.54	292.6	65.15	1740.44	5677.97	4459.46	4938.77	65.15	1557.83	5677.97	4459.46	4779.98
17.0	15.0	11	0.70	0.50	0.79	35.40	34.51	294.5	65.53	1761.02	5706.97	4482.24	4971.39	65.53	1578.42	5706.97	4482.24	4812.60

1.1.2.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO
Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3386	3259

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	1.3	10.43	2.62	732.75	368.32	281.15	10.43	2.62	732.75	368.32	262.15
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	2.5	10.76	5.33	756.18	380.10	271.71	10.76	5.33	756.18	380.10	243.28
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	3.8	11.10	8.11	779.60	391.87	261.62	11.10	8.11	779.60	391.87	223.79
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	5.0	11.43	10.99	803.02	403.64	250.86	11.43	10.99	803.02	403.64	203.68
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	6.3	11.76	13.94	826.45	415.42	239.45	11.76	13.94	826.45	415.42	182.95
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	7.5	12.10	16.98	849.87	427.19	227.39	12.10	16.98	849.87	427.19	161.61
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	8.8	12.43	20.11	873.29	438.97	214.66	12.43	20.11	873.29	438.97	139.65
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	10.1	12.76	23.31	896.72	450.74	201.28	12.76	23.31	896.72	450.74	117.07
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	11.3	13.10	26.61	920.14	462.51	187.23	13.10	26.61	920.14	462.51	93.88
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	12.6	23.20	32.44	417.95	210.08	174.67	7.74	28.55	136.72	68.73	68.83
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	13.8	23.20	38.27	419.78	211.00	179.17	7.91	30.54	139.76	70.25	70.43
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	15.1	23.20	44.10	421.61	211.93	183.66	8.09	32.57	142.80	71.78	72.07
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	16.3	23.20	49.93	423.45	212.85	188.16	8.26	34.65	145.84	73.31	73.75
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	17.6	23.20	55.76	425.28	213.77	225.36	8.43	36.77	148.88	74.84	117.13
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	18.8	23.20	61.59	427.11	214.69	263.40	8.60	38.93	151.92	76.36	161.33
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	20.1	23.20	67.42	428.95	215.61	302.29	8.78	41.14	154.96	77.89	206.38
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	21.4	23.20	73.25	430.78	216.53	342.02	8.95	43.39	158.00	79.42	252.27
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	22.6	23.20	79.08	432.61	217.45	382.59	9.12	45.68	161.04	80.95	299.00
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	23.9	23.20	84.91	434.45	218.38	424.00	9.29	48.01	164.08	82.47	346.56
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	25.1	23.20	90.75	436.28	219.30	466.25	9.46	50.39	167.12	84.00	394.96
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	26.4	23.20	96.58	438.11	220.22	509.35	9.64	52.81	170.16	85.53	444.21
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	27.6	23.20	102.41	439.94	221.14	553.29	9.81	55.28	173.20	87.06	494.29

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	28.9	23.20	108.24	441.78	222.06	598.07	9.98	57.79	176.24	88.59	545.21
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	30.2	18.36	112.85	1409.84	708.66	642.63	18.36	62.40	1409.84	708.66	598.76
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	31.4	18.71	117.55	1436.55	722.09	655.41	18.71	67.10	1436.55	722.09	611.54
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	32.7	19.06	122.34	1463.25	735.51	668.26	19.06	71.89	1463.25	735.51	624.39
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	33.9	19.40	127.22	1489.96	748.94	681.19	19.40	76.77	1489.96	748.94	637.32
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	35.2	19.75	132.18	1516.67	762.36	694.19	19.75	81.73	1516.67	762.36	650.32
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	36.4	20.10	137.24	1543.38	775.79	707.27	20.10	86.79	1543.38	775.79	663.40
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	37.7	20.45	142.38	1570.09	789.21	677.35	20.45	91.92	1570.09	789.21	622.28
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	39.0	20.80	147.60	1596.80	802.64	646.67	20.80	97.15	1596.80	802.64	580.44
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	40.2	21.14	152.92	1623.51	816.06	615.22	21.14	102.46	1623.51	816.06	537.87
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	41.5	21.49	158.32	1650.21	829.49	583.00	21.49	107.87	1650.21	829.49	494.58
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	42.7	21.84	163.81	1676.92	842.91	550.02	21.84	113.35	1676.92	842.91	450.56
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	44.0	22.19	169.38	1703.63	856.34	516.27	22.19	118.93	1703.63	856.34	405.82
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	45.2	22.53	175.05	1730.34	869.76	481.75	22.53	124.59	1730.34	869.76	360.35
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	46.5	22.88	180.80	1757.05	883.19	446.47	22.88	130.35	1757.05	883.19	314.15
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	47.8	23.23	186.64	1783.76	896.61	410.42	23.23	136.18	1783.76	896.61	267.23
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	49.0	23.58	192.56	1810.46	910.04	373.61	23.58	142.11	1810.46	910.04	219.59
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	50.3	25.00	198.84	564.57	283.78	336.27	13.24	145.44	233.73	117.48	168.88
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	51.5	25.00	205.13	566.40	284.71	341.15	13.41	148.81	236.76	119.01	171.69
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	52.8	25.00	211.41	568.24	285.63	346.04	13.58	152.22	239.80	120.54	174.53
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	54.0	25.00	217.69	570.07	286.55	350.93	13.75	155.68	242.84	122.07	177.41
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	55.3	25.00	223.98	571.90	287.47	355.82	13.92	159.18	245.88	123.59	180.33
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	56.5	25.00	230.26	573.74	288.39	360.71	14.10	162.72	248.92	125.12	183.29
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	57.8	25.00	236.54	575.57	289.31	365.60	14.27	166.30	251.96	126.65	186.28
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	59.1	25.00	242.83	577.40	290.23	370.49	14.44	169.93	255.00	128.18	189.31
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	60.3	25.00	249.11	579.23	291.15	375.38	14.61	173.61	258.04	129.70	192.38
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	61.6	25.00	255.39	581.07	292.08	380.27	14.78	177.32	261.08	131.23	195.49
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	62.8	25.00	261.68	582.90	293.00	385.16	14.96	181.08	264.12	132.76	198.63
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	64.1	25.00	267.96	584.73	293.92	390.05	15.13	184.88	267.16	134.29	201.81
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	65.3	25.00	274.24	586.57	294.84	394.94	15.30	188.73	270.20	135.82	205.03
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	66.6	25.00	280.53	588.40	295.76	399.83	15.47	192.62	273.24	137.34	208.29
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	67.9	25.00	286.81	590.23	296.68	404.72	15.65	196.55	276.27	138.87	211.58
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	69.1	25.00	293.09	592.07	297.60	409.61	15.82	200.53	279.31	140.40	214.90
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	70.4	25.00	299.38	593.90	298.53	414.50	15.99	204.54	282.35	141.93	218.25
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	71.6	25.00	305.66	595.73	299.45	419.39	16.16	208.61	285.39	143.45	221.63
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	72.9	25.00	311.94	597.56	300.37	424.28	16.33	212.71	288.43	144.98	225.04
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	74.1	25.00	318.23	599.40	301.29	429.17	16.51	216.86	291.47	146.51	228.48
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	75.4	25.00	324.51	601.23	302.21	434.06	16.68	221.05	294.51	148.04	231.94
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	76.7	25.00	330.79	603.06	303.13	438.94	16.85	225.29	297.55	149.56	235.43
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	77.9	25.00	337.07	604.90	304.05	443.83	17.02	229.56	300.59	151.09	238.95
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	79.2	25.00	343.36	606.73	304.98	448.72	17.19	233.89	303.63	152.62	242.49
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	80.4	25.00	349.64	608.56	305.90	453.61	17.37	238.25	306.67	154.15	246.07
8.5	6.5	5	0.50	0.50	0.40	19.00	3.56	81.7	25.00	355.92	610.40	306.82	458.50	17.54	242.66	309.44	155.54	249.66
8.6	6.6	5	0.50	0.50	0.40	19.00	3.56	82.9	25.00	362.21	612.23	307.74	463.39	17.71	247.11	312.21	156.94	253.30
8.7	6.7	5	0.50	0.50	0.40	19.00	3.56	84.2	25.00	368.49	614.06	308.66	468.28	17.88	251.60	314.98	158.32	256.96
8.8	6.8	5	0.50	0.50	0.40	19.00	3.56	85.5	25.00	374.77	615.89	309.58	473.17	18.06	256.14	317.73	159.71	260.67
8.9	6.9	5	0.50	0.50	0.40	19.00	3.55	86.7	25.00	381.06	617.73	310.50	478.06	18.23	260.72	320.48	161.09	264.41

9.0	7.0	5	0.50	0.50	0.40	19.00	3.55	88.0	25.00	387.34	619.56	311.42	482.95	18.40	265.35	323.23	162.47	268.18
9.1	7.1	5	0.50	0.50	0.40	19.00	3.55	89.2	25.00	393.62	621.39	312.35	487.84	18.57	270.02	325.96	163.85	271.99
9.2	7.2	5	0.50	0.50	0.40	19.00	3.54	90.5	25.00	399.91	623.23	313.27	492.73	18.74	274.73	328.69	165.22	275.83
9.3	7.3	5	0.50	0.50	0.40	19.00	3.54	91.7	25.00	406.19	625.06	314.19	497.62	18.92	279.48	331.42	166.59	279.71
9.4	7.4	5	0.50	0.50	0.40	19.00	3.54	93.0	25.00	412.47	626.89	315.11	502.51	19.09	284.28	334.13	167.95	283.63
9.5	7.5	5	0.50	0.50	0.40	19.00	3.53	94.2	25.00	418.76	628.73	316.03	507.40	19.26	289.12	336.85	169.32	287.57
9.6	7.6	5	0.50	0.50	0.40	19.00	3.53	95.5	25.00	425.04	630.56	316.95	512.29	19.43	294.00	339.55	170.68	291.56
9.7	7.7	5	0.50	0.50	0.40	19.00	3.53	96.8	25.00	431.32	632.39	317.87	517.18	19.60	298.93	342.25	172.03	295.58
9.8	7.8	5	0.50	0.50	0.40	19.00	3.52	98.0	25.00	437.61	634.22	318.80	522.07	19.78	303.90	344.94	173.38	299.63
9.9	7.9	5	0.50	0.50	0.40	19.00	3.52	99.3	25.00	443.89	636.06	319.72	526.96	19.95	308.91	347.62	174.73	303.72
10.0	8.0	5	0.50	0.50	0.40	19.00	3.52	100.5	25.00	450.17	637.89	320.64	531.85	20.12	313.97	350.30	176.08	307.84
10.1	8.1	5	0.50	0.50	0.40	19.00	3.51	101.8	25.00	456.46	639.72	321.56	679.25	20.29	319.07	352.96	177.42	463.95
10.2	8.2	5	0.50	0.50	0.40	19.00	3.51	103.0	25.00	462.74	641.56	322.48	827.91	20.46	324.21	355.63	178.76	621.33
10.3	8.3	5	0.50	0.50	0.40	19.00	3.51	104.3	25.00	469.02	643.39	323.40	977.84	20.64	329.40	358.28	180.09	779.99
10.4	8.4	5	0.50	0.50	0.40	19.00	3.50	105.6	25.00	475.30	645.22	324.32	1129.03	20.81	334.63	360.93	181.42	939.91
10.5	8.5	5	0.50	0.50	0.40	19.00	3.50	106.8	25.00	481.59	647.06	325.25	1281.48	20.98	339.90	363.57	182.75	1101.11
10.6	8.6	5	0.50	0.50	0.40	19.00	3.50	108.1	25.00	487.87	648.89	326.17	1435.18	21.15	345.22	366.21	184.08	1263.56
10.7	8.7	5	0.50	0.50	0.40	19.00	3.49	109.3	25.00	494.15	650.72	327.09	1554.03	21.33	350.58	368.83	185.40	1391.17
10.8	8.8	5	0.50	0.50	0.40	19.00	3.49	110.6	25.00	500.44	652.55	328.01	1673.85	21.50	355.98	371.45	186.71	1519.77
10.9	8.9	5	0.50	0.50	0.40	19.00	3.49	111.8	25.00	506.72	654.39	328.93	1831.30	21.67	361.43	374.06	188.03	1686.00
11.0	9.0	5	0.50	0.50	0.40	19.00	3.48	113.1	25.00	513.00	656.22	329.85	1989.99	21.84	366.92	376.67	189.33	1853.49
11.1	9.1	6	0.70	0.50	0.86	37.70	44.63	114.4	46.91	524.79	4868.30	2447.07	2154.71	46.91	378.71	4868.30	2447.07	2027.68
11.2	9.2	6	0.70	0.50	0.86	37.70	44.60	115.6	47.32	536.69	4907.53	2466.79	2178.24	47.32	390.60	4907.53	2466.79	2051.21
11.3	9.3	6	0.70	0.50	0.86	37.70	44.57	116.9	47.73	548.68	4946.67	2486.47	2201.84	47.73	402.59	4946.67	2486.47	2074.81
11.4	9.4	6	0.70	0.50	0.86	37.70	44.54	118.1	48.14	560.78	4985.74	2506.10	2225.49	48.14	414.69	4985.74	2506.10	2098.46
11.5	9.5	6	0.70	0.50	0.86	37.70	44.51	119.4	48.55	572.98	5024.72	2525.70	2249.20	48.55	426.90	5024.72	2525.70	2122.17
11.6	9.6	6	0.70	0.50	0.86	37.70	44.48	120.6	48.96	585.29	5063.62	2545.25	2272.97	48.96	439.20	5063.62	2545.25	2145.93
11.7	9.7	7	0.70	0.50	0.79	35.40	35.15	121.9	45.49	596.72	4035.67	2028.55	2295.94	45.49	450.63	4035.67	2028.55	2168.91
11.8	9.8	7	0.70	0.50	0.79	35.40	35.13	123.2	45.87	608.25	4066.20	2043.89	2355.08	45.87	462.16	4066.20	2043.89	2228.04
11.9	9.9	8	0.70	0.50	0.86	37.70	44.38	124.4	50.19	620.87	5179.80	2603.65	2415.40	50.19	474.78	5179.80	2603.65	2288.37
12.0	10.0	8	0.70	0.50	0.86	37.70	44.35	125.7	50.60	633.58	5218.36	2623.04	2439.39	50.60	487.50	5218.36	2623.04	2312.36
12.1	10.1	8	0.70	0.50	0.86	37.70	44.32	126.9	51.01	646.40	5256.83	2642.37	2463.44	51.01	500.32	5256.83	2642.37	2336.41
12.2	10.2	8	0.70	0.50	0.86	37.70	44.29	128.2	51.42	659.33	5295.22	2661.67	2487.55	51.42	513.24	5295.22	2661.67	2360.52
12.3	10.3	8	0.70	0.50	0.86	37.70	44.25	129.4	51.83	672.35	5333.52	2680.92	2511.71	51.83	526.27	5333.52	2680.92	2384.68
12.4	10.4	8	0.70	0.50	0.86	37.70	44.22	130.7	52.24	685.48	5371.72	2700.12	2535.93	52.24	539.40	5371.72	2700.12	2408.90
12.5	10.5	8	0.70	0.50	0.86	37.70	44.19	131.9	52.65	698.72	5409.84	2719.28	2560.20	52.65	552.63	5409.84	2719.28	2433.17
12.6	10.6	8	0.70	0.50	0.86	37.70	44.15	133.2	53.06	712.05	5447.87	2738.40	2584.53	53.06	565.97	5447.87	2738.40	2457.50
12.7	10.7	8	0.70	0.50	0.86	37.70	44.12	134.5	53.47	725.49	5485.81	2757.47	2608.91	53.47	579.41	5485.81	2757.47	2481.88
12.8	10.8	8	0.70	0.50	0.86	37.70	44.09	135.7	53.88	739.04	5523.66	2776.49	2633.34	53.88	592.95	5523.66	2776.49	2506.31
12.9	10.9	8	0.70	0.50	0.86	37.70	44.05	137.0	54.29	752.68	5561.41	2795.47	2657.83	54.29	606.59	5561.41	2795.47	2530.80
13.0	11.0	8	0.70	0.50	0.86	37.70	44.02	138.2	54.70	766.43	5599.07	2814.40	2682.38	54.70	620.34	5599.07	2814.40	2555.35
13.1	11.1	8	0.70	0.50	0.86	37.70	43.98	139.5	55.11	780.28	5636.64	2833.28	2706.97	55.11	634.20	5636.64	2833.28	2579.94
13.2	11.2	8	0.70	0.50	0.86	37.70	43.95	140.7	55.53	794.24	5674.11	2852.12	2731.63	55.53	648.15	5674.11	2852.12	2604.59
13.3	11.3	8	0.70	0.50	0.86	37.70	43.91	142.0	55.94	808.30	5711.49	2870.91	2756.33	55.94	662.21	5711.49	2870.91	2629.30
13.4	11.4	8	0.70	0.50	0.86	37.70	43.88	143.3	56.35	822.46	5748.78	2889.65	2781.08	56.35	676.37	5748.78	2889.65	2654.05
13.5	11.5	8	0.70	0.50	0.86	37.70	43.84	144.5	56.76	836.72	5785.96	2908.34	2805.89	56.76	690.63	5785.96	2908.34	2678.86
13.6	11.6	8	0.70	0.50	0.86	37.70	43.81	145.8	57.17	851.09	5823.05	2926.99	2830.75	57.17	705.00	5823.05	2926.99	2703.72

13.7	11.7	8	0.70	0.50	0.86	37.70	43.77	147.0	57.58	865.56	5860.04	2945.58	2855.67	57.58	719.47	5860.04	2945.58	2728.63
13.8	11.8	8	0.70	0.50	0.86	37.70	43.74	148.3	57.99	880.13	5896.94	2964.12	2836.19	57.99	734.05	5896.94	2964.12	2709.15
13.9	11.9	8	0.70	0.50	0.86	37.70	43.70	149.5	58.40	894.81	5933.73	2982.62	2816.57	58.40	748.72	5933.73	2982.62	2689.53
14.0	12.0	8	0.70	0.50	0.86	37.70	43.66	150.8	58.81	909.59	5970.43	3001.06	2867.30	58.81	763.50	5970.43	3001.06	2740.27
14.1	12.1	8	0.70	0.50	0.86	37.70	43.63	152.1	59.22	924.47	6007.02	3019.46	2918.32	59.22	778.39	6007.02	3019.46	2791.29
14.2	12.2	8	0.70	0.50	0.86	37.70	43.59	153.3	59.63	939.46	6043.51	3037.80	2969.62	59.63	793.37	6043.51	3037.80	2842.59
14.3	12.3	8	0.70	0.50	0.86	37.70	43.55	154.6	60.04	954.55	6079.90	3056.09	3021.22	60.04	808.46	6079.90	3056.09	2894.19
14.4	12.4	8	0.70	0.50	0.86	37.70	43.51	155.8	60.45	969.74	6116.19	3074.33	3073.11	60.45	823.65	6116.19	3074.33	2946.08
14.5	12.5	8	0.70	0.50	0.86	37.70	43.48	157.1	60.86	985.04	6152.37	3092.52	3125.30	60.86	838.95	6152.37	3092.52	2998.27
14.6	12.6	8	0.70	0.50	0.86	37.70	43.44	158.3	61.27	1000.43	6188.45	3110.66	3177.78	61.27	854.35	6188.45	3110.66	3050.75
14.7	12.7	8	0.70	0.50	0.86	37.70	43.40	159.6	61.68	1015.94	6224.43	3128.74	3230.56	61.68	869.85	6224.43	3128.74	3103.53
14.8	12.8	9	0.70	0.50	0.79	35.40	34.27	160.8	57.21	1030.32	4947.26	2486.76	3282.57	57.21	884.23	4947.26	2486.76	3155.54
14.9	12.9	9	0.70	0.50	0.79	35.40	34.25	162.1	57.59	1044.79	4977.42	2501.93	3379.33	57.59	898.70	4977.42	2501.93	3252.29
15.0	13.0	10	0.70	0.50	0.90	38.85	48.47	163.4	65.51	1061.25	7089.94	3563.79	3478.21	65.51	915.17	7089.94	3563.79	3351.18
15.1	13.1	10	0.70	0.50	0.90	38.85	48.44	164.6	65.94	1077.83	7132.46	3585.17	3507.11	65.94	931.74	7132.46	3585.17	3380.08
15.2	13.2	10	0.70	0.50	0.90	38.85	48.42	165.9	66.36	1094.51	7174.94	3606.52	3536.09	66.36	948.42	7174.94	3606.52	3409.06
15.3	13.3	10	0.70	0.50	0.90	38.85	48.39	167.1	66.79	1111.29	7217.36	3627.84	3565.14	66.79	965.20	7217.36	3627.84	3438.11
15.4	13.4	10	0.70	0.50	0.90	38.85	48.37	168.4	67.22	1128.19	7259.74	3649.14	3594.27	67.22	982.10	7259.74	3649.14	3467.23
15.5	13.5	10	0.70	0.50	0.90	38.85	48.34	169.6	67.65	1145.19	7302.08	3670.42	3623.47	67.65	999.10	7302.08	3670.42	3496.44
15.6	13.6	10	0.70	0.50	0.90	38.85	48.32	170.9	68.07	1162.30	7344.36	3691.68	3652.75	68.07	1016.21	7344.36	3691.68	3525.72
15.7	13.7	10	0.70	0.50	0.90	38.85	48.29	172.2	68.50	1179.51	7386.61	3712.91	3682.11	68.50	1033.42	7386.61	3712.91	3555.08
15.8	13.8	10	0.70	0.50	0.90	38.85	48.27	173.4	68.93	1196.83	7428.80	3734.12	3711.54	68.93	1050.75	7428.80	3734.12	3584.51
15.9	13.9	10	0.70	0.50	0.90	38.85	48.24	174.7	69.35	1214.27	7470.95	3755.31	3662.66	69.35	1068.18	7470.95	3755.31	3535.63
16.0	14.0	10	0.70	0.50	0.90	38.85	48.22	175.9	69.78	1231.80	7513.05	3776.47	3613.45	69.78	1085.72	7513.05	3776.47	3486.41
16.1	14.1	10	0.70	0.50	0.90	38.85	48.19	177.2	70.21	1249.45	7555.11	3797.61	3563.90	70.21	1103.36	7555.11	3797.61	3436.86
16.2	14.2	10	0.70	0.50	0.90	38.85	48.17	178.4	70.64	1267.20	7597.12	3818.73	3514.01	70.64	1121.12	7597.12	3818.73	3386.98
16.3	14.3	10	0.70	0.50	0.90	38.85	48.14	179.7	71.06	1285.06	7639.09	3839.83	3463.80	71.06	1138.98	7639.09	3839.83	3336.77
16.4	14.4	10	0.70	0.50	0.90	38.85	48.12	181.0	71.49	1303.03	7681.01	3860.90	3413.25	71.49	1156.94	7681.01	3860.90	3286.22
16.5	14.5	10	0.70	0.50	0.90	38.85	48.09	182.2	71.92	1321.11	7722.88	3881.95	3413.97	71.92	1175.02	7722.88	3881.95	3286.93
16.6	14.6	10	0.70	0.50	0.90	38.85	48.07	183.5	72.35	1339.29	7764.71	3902.97	3414.61	72.35	1193.20	7764.71	3902.97	3287.58
16.7	14.7	10	0.70	0.50	0.90	38.85	48.04	184.7	72.77	1357.58	7806.50	3923.97	3415.19	72.77	1211.49	7806.50	3923.97	3288.16
16.8	14.8	10	0.70	0.50	0.90	38.85	48.02	186.0	73.20	1375.97	7848.23	3944.95	3415.69	73.20	1229.89	7848.23	3944.95	3288.66
16.9	14.9	11	0.70	0.50	0.79	35.40	33.90	187.2	65.15	1392.35	5574.07	2801.84	3361.64	65.15	1246.26	5574.07	2801.84	3234.60
17.0	15.0	11	0.70	0.50	0.79	35.40	33.89	188.5	65.53	1408.82	5603.57	2816.66	3385.63	65.53	1262.73	5603.57	2816.66	3258.59

1.1.2.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**2.0**	**19.35**	**35**		0.70	0.50	0.70
2	**2.0**	**2.9**	**19.35**	**35**		0.70	0.50	0.70
3	**2.9**	**4.3**	**18.33**	**22**	**40**	0.58	0.50	0.40
4	**4.3**	**5.9**	**19.35**			0.70	0.50	0.00
5	**5.9**	**11.0**	**18.33**	**22**	**50**	0.50	0.50	0.40
6	**11.0**	**11.6**	**19.35**	**41**		0.70	0.50	0.86
7	**11.6**	**11.8**	**19.35**			0.70	0.50	0.00
8	**11.8**	**14.7**	**19.35**	**41**		0.70	0.50	0.86
9	**14.7**	**14.9**	**19.35**			0.70	0.50	0.00
10	**14.9**	**16.8**	**19.35**	**42**		0.70	0.50	0.90
11	**16.8**	**17.4**	**19.35**			0.70	0.50	0.00
12	**17.4**	**17.8**	**19.35**	**41**		0.70	0.50	0.86
13	**17.8**	**18.0**	**19.35**			0.70	0.50	0.00

1.1.2.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3504	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.8	10.43	3.93	732.75	828.73	630.87
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	5.7	10.76	7.99	756.18	855.22	607.88
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	8.5	11.10	12.17	779.60	881.71	583.35
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	11.3	11.43	16.48	803.02	908.20	557.28
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	14.1	11.76	20.92	826.45	934.69	529.68
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	17.0	12.10	25.48	849.87	961.18	500.54
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	19.8	12.43	30.16	873.29	987.67	469.87
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	22.6	12.76	34.97	896.72	1014.16	437.67
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	25.4	13.10	39.91	920.14	1040.66	403.93
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	28.3	23.20	48.66	417.95	472.69	371.85
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	31.1	23.20	57.40	419.78	474.76	378.17
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	33.9	23.20	66.15	421.61	476.83	384.48
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	36.8	23.20	74.89	423.45	478.91	390.79
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	39.6	23.20	83.64	425.28	480.98	363.32
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	42.4	23.20	92.39	427.11	483.05	335.71
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	101.13	428.95	485.13	307.96
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	48.1	23.20	109.88	430.78	487.20	280.07
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	50.9	23.20	118.63	432.61	489.27	252.04
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	53.7	23.20	127.37	434.45	491.35	223.87
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	56.5	23.20	136.12	436.28	493.42	195.56
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	59.4	23.20	144.86	438.11	495.49	167.11
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	62.2	23.20	153.61	439.94	497.56	138.52

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	65.0	23.20	162.36	441.78	499.64	109.79
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	67.9	0.00	162.36	0.00	0.00	73.32
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	162.36	0.00	0.00	70.49
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	73.5	0.00	162.36	0.00	0.00	67.67
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	76.3	0.00	162.36	0.00	0.00	64.84
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	79.2	0.00	162.36	0.00	0.00	62.01
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	82.0	0.00	162.36	0.00	0.00	59.18
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	84.8	0.00	162.36	0.00	0.00	99.35
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	87.7	0.00	162.36	0.00	0.00	139.66
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	90.5	0.00	162.36	0.00	0.00	180.11
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	162.36	0.00	0.00	220.70
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	162.36	0.00	0.00	261.43
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	162.36	0.00	0.00	302.30
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	162.36	0.00	0.00	343.31
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	162.36	0.00	0.00	384.45
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	162.36	0.00	0.00	425.74
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	162.36	0.00	0.00	467.17
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	113.1	25.00	171.78	564.57	638.51	516.93
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	115.9	25.00	181.21	566.40	640.59	523.83
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	118.8	25.00	190.63	568.24	642.66	530.74
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	121.6	25.00	200.06	570.07	644.73	537.64
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	124.4	25.00	209.48	571.90	646.81	544.54
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	127.2	25.00	218.91	573.74	648.88	551.45
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	130.1	25.00	228.33	575.57	650.95	558.35
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	132.9	25.00	237.75	577.40	653.03	565.25
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	135.7	25.00	247.18	579.23	655.10	572.16
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	138.5	25.00	256.60	581.07	657.17	579.06
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	266.03	582.90	659.24	585.97
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	144.2	25.00	275.45	584.73	661.32	592.87
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	147.0	25.00	284.88	586.57	663.39	599.77
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	149.9	25.00	294.30	588.40	665.46	606.68
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	152.7	25.00	303.73	590.23	667.54	613.58
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	155.5	25.00	313.15	592.07	669.61	620.48
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	158.3	25.00	322.58	593.90	671.68	627.39
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	161.2	25.00	332.00	595.73	673.76	634.29
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	164.0	25.00	341.43	597.56	675.83	641.19
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	166.8	25.00	350.85	599.40	677.90	648.10
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	169.6	25.00	360.28	601.23	679.98	655.00
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	172.5	25.00	369.70	603.06	682.05	661.91
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	175.3	25.00	379.13	604.90	684.12	668.81
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	178.1	25.00	388.55	606.73	686.19	675.71
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	181.0	25.00	397.98	608.56	688.27	682.62
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	183.8	25.00	407.40	610.40	690.34	689.52
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	186.6	25.00	416.83	612.23	692.41	696.42
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	189.4	25.00	426.25	614.06	694.49	703.33
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	192.3	25.00	435.67	615.89	696.56	710.23
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	195.1	25.00	445.10	617.73	698.63	717.13

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	197.9	25.00	454.52	619.56	700.71	724.04
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	200.7	25.00	463.95	621.39	702.78	730.94
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	203.6	25.00	473.37	623.23	704.85	737.85
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	206.4	25.00	482.80	625.06	706.93	744.75
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	209.2	25.00	492.22	626.89	709.00	751.65
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	212.1	25.00	501.65	628.73	711.07	758.56
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	214.9	25.00	511.07	630.56	713.14	765.46
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	217.7	25.00	520.50	632.39	715.22	772.36
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	220.5	25.00	529.92	634.22	717.29	779.27
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	223.4	25.00	539.35	636.06	719.36	786.17
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	226.2	25.00	548.77	637.89	721.44	793.07
10.1	8.1	5	0.50	0.50	0.40	19.00	3.57	229.0	25.00	558.20	639.72	723.51	1126.83
10.2	8.2	5	0.50	0.50	0.40	19.00	3.57	231.8	25.00	567.62	641.56	725.58	1463.74
10.3	8.3	5	0.50	0.50	0.40	19.00	3.57	234.7	25.00	577.05	643.39	727.66	1803.80
10.4	8.4	5	0.50	0.50	0.40	19.00	3.57	237.5	25.00	586.47	645.22	729.73	2147.03
10.5	8.5	5	0.50	0.50	0.40	19.00	3.57	240.3	25.00	595.90	647.06	731.80	2493.41
10.6	8.6	5	0.50	0.50	0.40	19.00	3.57	243.2	25.00	605.32	648.89	733.88	2842.95
10.7	8.7	5	0.50	0.50	0.40	19.00	3.57	246.0	25.00	614.75	650.72	735.95	2798.90
10.8	8.8	5	0.50	0.50	0.40	19.00	3.57	248.8	25.00	624.17	652.55	738.02	2754.71
10.9	8.9	5	0.50	0.50	0.40	19.00	3.57	251.6	25.00	633.60	654.39	740.09	3113.27
11.0	9.0	5	0.50	0.50	0.40	19.00	3.57	254.5	25.00	643.02	656.22	742.17	3474.84
11.1	9.1	6	0.70	0.50	0.86	37.70	45.38	257.3	46.91	660.70	4949.67	5597.95	3846.59
11.2	9.2	6	0.70	0.50	0.86	37.70	45.38	260.1	47.32	678.54	4992.96	5646.91	3894.62
11.3	9.3	6	0.70	0.50	0.86	37.70	45.38	263.0	47.73	696.54	5036.25	5695.87	3942.62
11.4	9.4	6	0.70	0.50	0.86	37.70	45.38	265.8	48.14	714.69	5079.55	5744.83	3990.58
11.5	9.5	6	0.70	0.50	0.86	37.70	45.38	268.6	48.55	732.99	5122.84	5793.79	4038.51
11.6	9.6	6	0.70	0.50	0.86	37.70	45.38	271.4	48.96	751.45	5166.13	5842.75	4086.39
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	274.3	0.00	751.45	0.00	0.00	4118.05
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	277.1	0.00	751.45	0.00	0.00	4546.28
11.9	9.9	8	0.70	0.50	0.86	37.70	45.33	279.9	50.19	770.37	5290.13	5983.00	4994.07
12.0	10.0	8	0.70	0.50	0.86	37.70	45.31	282.7	50.60	789.44	5331.38	6029.65	5042.20
12.1	10.1	8	0.70	0.50	0.86	37.70	45.29	285.6	51.01	808.68	5372.59	6076.25	5090.44
12.2	10.2	8	0.70	0.50	0.86	37.70	45.28	288.4	51.42	828.06	5413.75	6122.81	5138.77
12.3	10.3	8	0.70	0.50	0.86	37.70	45.26	291.2	51.83	847.60	5454.88	6169.32	5187.20
12.4	10.4	8	0.70	0.50	0.86	37.70	45.24	294.1	52.24	867.30	5495.95	6215.78	5235.72
12.5	10.5	8	0.70	0.50	0.86	37.70	45.23	296.9	52.65	887.15	5536.99	6262.19	5284.35
12.6	10.6	8	0.70	0.50	0.86	37.70	45.21	299.7	53.06	907.15	5577.98	6308.55	5333.07
12.7	10.7	8	0.70	0.50	0.86	37.70	45.19	302.5	53.47	927.31	5618.92	6354.85	5381.88
12.8	10.8	8	0.70	0.50	0.86	37.70	45.17	305.4	53.88	947.62	5659.83	6401.11	5430.79
12.9	10.9	8	0.70	0.50	0.86	37.70	45.16	308.2	54.29	968.09	5700.68	6447.32	5479.80
13.0	11.0	8	0.70	0.50	0.86	37.70	45.14	311.0	54.70	988.72	5741.50	6493.48	5528.91
13.1	11.1	8	0.70	0.50	0.86	37.70	45.12	313.8	55.11	1009.49	5782.26	6539.59	5578.11
13.2	11.2	8	0.70	0.50	0.86	37.70	45.10	316.7	55.53	1030.43	5822.99	6585.64	5627.40
13.3	11.3	8	0.70	0.50	0.86	37.70	45.08	319.5	55.94	1051.51	5863.66	6631.64	5676.79
13.4	11.4	8	0.70	0.50	0.86	37.70	45.07	322.3	56.35	1072.76	5904.29	6677.60	5726.27
13.5	11.5	8	0.70	0.50	0.86	37.70	45.05	325.2	56.76	1094.15	5944.87	6723.49	5775.85
13.6	11.6	8	0.70	0.50	0.86	37.70	45.03	328.0	57.17	1115.70	5985.41	6769.34	5825.52

13.7	11.7	8	0.70	0.50	0.86	37.70	45.01	330.8	57.58	1137.41	6025.90	6815.13	5875.29
13.8	11.8	8	0.70	0.50	0.86	37.70	44.99	333.6	57.99	1159.27	6066.34	6860.87	5432.54
13.9	11.9	8	0.70	0.50	0.86	37.70	44.97	336.5	58.40	1181.28	6106.74	6906.56	4986.85
14.0	12.0	8	0.70	0.50	0.86	37.70	44.95	339.3	58.81	1203.45	6147.09	6952.19	5095.90
14.1	12.1	8	0.70	0.50	0.86	37.70	44.94	342.1	59.22	1225.78	6187.39	6997.77	5205.40
14.2	12.2	8	0.70	0.50	0.86	37.70	44.92	344.9	59.63	1248.26	6227.64	7043.29	5315.36
14.3	12.3	8	0.70	0.50	0.86	37.70	44.90	347.8	60.04	1270.89	6267.84	7088.76	5425.78
14.4	12.4	8	0.70	0.50	0.86	37.70	44.88	350.6	60.45	1293.68	6307.99	7134.17	5536.65
14.5	12.5	8	0.70	0.50	0.86	37.70	44.86	353.4	60.86	1316.62	6348.10	7179.53	5647.98
14.6	12.6	8	0.70	0.50	0.86	37.70	44.84	356.3	61.27	1339.72	6388.15	7224.83	5759.76
14.7	12.7	8	0.70	0.50	0.86	37.70	44.82	359.1	61.68	1362.97	6428.16	7270.08	5871.99
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	361.9	0.00	1362.97	0.00	0.00	5964.32
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	364.7	0.00	1362.97	0.00	0.00	6549.58
15.0	13.0	10	0.70	0.50	0.90	38.85	50.06	367.6	65.51	1387.67	7322.58	8281.65	7159.67
15.1	13.1	10	0.70	0.50	0.90	38.85	50.04	370.4	65.94	1412.53	7367.16	8332.06	7215.56
15.2	13.2	10	0.70	0.50	0.90	38.85	50.02	373.2	66.36	1437.55	7411.68	8382.42	7271.55
15.3	13.3	10	0.70	0.50	0.90	38.85	49.99	376.0	66.79	1462.73	7456.15	8432.71	7327.62
15.4	13.4	10	0.70	0.50	0.90	38.85	49.97	378.9	67.22	1488.07	7500.56	8482.93	7383.79
15.5	13.5	10	0.70	0.50	0.90	38.85	49.95	381.7	67.65	1513.57	7544.91	8533.09	7440.05
15.6	13.6	10	0.70	0.50	0.90	38.85	49.93	384.5	68.07	1539.23	7589.20	8583.18	7496.39
15.7	13.7	10	0.70	0.50	0.90	38.85	49.91	387.4	68.50	1565.06	7633.43	8633.21	7552.83
15.8	13.8	10	0.70	0.50	0.90	38.85	49.88	390.2	68.93	1591.04	7677.61	8683.17	7609.36
15.9	13.9	10	0.70	0.50	0.90	38.85	49.86	393.0	69.35	1617.19	7721.73	8733.07	7044.54
16.0	14.0	10	0.70	0.50	0.90	38.85	49.84	395.8	69.78	1643.50	7765.79	8782.90	6476.50
16.1	14.1	10	0.70	0.50	0.90	38.85	49.82	398.7	70.21	1669.96	7809.79	8832.66	5905.25
16.2	14.2	10	0.70	0.50	0.90	38.85	49.79	401.5	70.64	1696.59	7853.73	8882.35	5330.79
16.3	14.3	10	0.70	0.50	0.90	38.85	49.77	404.3	71.06	1723.38	7897.60	8931.98	4753.12
16.4	14.4	10	0.70	0.50	0.90	38.85	49.75	407.2	71.49	1750.33	7941.42	8981.54	4172.25
16.5	14.5	10	0.70	0.50	0.90	38.85	49.72	410.0	71.92	1777.45	7985.18	9031.03	4161.43
16.6	14.6	10	0.70	0.50	0.90	38.85	49.70	412.8	72.35	1804.72	8028.88	9080.45	4150.35
16.7	14.7	10	0.70	0.50	0.90	38.85	49.68	415.6	72.77	1832.16	8072.52	9129.80	4139.00
16.8	14.8	10	0.70	0.50	0.90	38.85	49.65	418.5	73.20	1859.75	8116.09	9179.08	4127.39
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1859.75	0.00	0.00	3506.45
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1859.75	0.00	0.00	3503.62

1.1.2.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	2631	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.0	10.43	3.28	732.75	575.50	438.58
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	3.9	10.76	6.66	756.18	593.90	423.10
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	5.9	11.10	10.14	779.60	612.30	406.57
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	7.9	11.43	13.73	803.02	630.69	388.99
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	9.8	11.76	17.43	826.45	649.09	370.36
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	11.8	12.10	21.23	849.87	667.49	350.68
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	13.7	12.43	25.13	873.29	685.88	329.94
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	15.7	12.76	29.14	896.72	704.28	308.16
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	17.7	13.10	33.26	920.14	722.68	285.32
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	19.6	23.20	40.55	417.95	328.26	264.11
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	21.6	23.20	47.84	419.78	329.70	269.55
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	23.6	23.20	55.12	421.61	331.13	274.99
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	25.5	23.20	62.41	423.45	332.57	280.43
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	27.5	23.20	69.70	425.28	334.01	262.41
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	29.5	23.20	76.99	427.11	335.45	244.29
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	31.4	23.20	84.28	428.95	336.89	226.07
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	33.4	23.20	91.57	430.78	338.33	207.76
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	35.3	23.20	98.85	432.61	339.77	189.35
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	37.3	23.20	106.14	434.45	341.21	170.85
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	39.3	23.20	113.43	436.28	342.65	152.24
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	41.2	23.20	120.72	438.11	344.09	133.54
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	43.2	23.20	128.01	439.94	345.53	114.75

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	135.30	441.78	346.97	95.85
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	47.1	0.00	135.30	0.00	0.00	70.53
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	49.1	0.00	135.30	0.00	0.00	68.56
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	51.1	0.00	135.30	0.00	0.00	66.60
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	53.0	0.00	135.30	0.00	0.00	64.64
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	55.0	0.00	135.30	0.00	0.00	62.67
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	56.9	0.00	135.30	0.00	0.00	60.71
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	58.9	0.00	135.30	0.00	0.00	88.60
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	60.9	0.00	135.30	0.00	0.00	116.60
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	62.8	0.00	135.30	0.00	0.00	144.69
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	135.30	0.00	0.00	172.87
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	135.30	0.00	0.00	201.16
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	135.30	0.00	0.00	229.54
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	135.30	0.00	0.00	258.02
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	135.30	0.00	0.00	286.59
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	135.30	0.00	0.00	315.26
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	135.30	0.00	0.00	344.03
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	78.5	25.00	143.15	564.57	443.41	379.72
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	80.5	25.00	151.00	566.40	444.85	385.66
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	82.5	25.00	158.86	568.24	446.29	391.59
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	84.4	25.00	166.71	570.07	447.73	397.52
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	86.4	25.00	174.57	571.90	449.17	403.45
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	88.4	25.00	182.42	573.74	450.61	409.39
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	90.3	25.00	190.27	575.57	452.05	415.32
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	92.3	25.00	198.13	577.40	453.49	421.25
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	94.2	25.00	205.98	579.23	454.93	427.18
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	96.2	25.00	213.84	581.07	456.37	433.12
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	98.2	25.00	221.69	582.90	457.81	439.05
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	100.1	25.00	229.54	584.73	459.25	444.98
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	102.1	25.00	237.40	586.57	460.69	450.91
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	104.1	25.00	245.25	588.40	462.13	456.85
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	106.0	25.00	253.11	590.23	463.57	462.78
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	108.0	25.00	260.96	592.07	465.01	468.71
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	110.0	25.00	268.81	593.90	466.45	474.64
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	111.9	25.00	276.67	595.73	467.89	480.58
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	113.9	25.00	284.52	597.56	469.33	486.51
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	115.8	25.00	292.38	599.40	470.77	492.44
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	117.8	25.00	300.23	601.23	472.20	498.37
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	119.8	25.00	308.08	603.06	473.64	504.31
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	121.7	25.00	315.94	604.90	475.08	510.24
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	123.7	25.00	323.79	606.73	476.52	516.17
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	125.7	25.00	331.65	608.56	477.96	522.10
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	127.6	25.00	339.50	610.40	479.40	528.04
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	129.6	25.00	347.35	612.23	480.84	533.97
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	131.6	25.00	355.21	614.06	482.28	539.90
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	133.5	25.00	363.06	615.89	483.72	545.83
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	135.5	25.00	370.92	617.73	485.16	551.77

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	137.4	25.00	378.77	619.56	486.60	557.70
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	139.4	25.00	386.62	621.39	488.04	563.63
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	394.48	623.23	489.48	569.56
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	143.3	25.00	402.33	625.06	490.92	575.50
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	145.3	25.00	410.19	626.89	492.36	581.43
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	147.3	25.00	418.04	628.73	493.80	587.36
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	149.2	25.00	425.89	630.56	495.24	593.29
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	151.2	25.00	433.75	632.39	496.68	599.23
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	153.2	25.00	441.60	634.22	498.12	605.16
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	155.1	25.00	449.46	636.06	499.56	611.09
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	157.1	25.00	457.31	637.89	501.00	617.02
10.1	8.1	5	0.50	0.50	0.40	19.00	3.56	159.0	25.00	465.16	639.72	502.44	848.62
10.2	8.2	5	0.50	0.50	0.40	19.00	3.56	161.0	25.00	473.02	641.56	503.88	1082.28
10.3	8.3	5	0.50	0.50	0.40	19.00	3.56	163.0	25.00	480.87	643.39	505.32	1317.99
10.4	8.4	5	0.50	0.50	0.40	19.00	3.56	164.9	25.00	488.73	645.22	506.76	1555.75
10.5	8.5	5	0.50	0.50	0.40	19.00	3.56	166.9	25.00	496.58	647.06	508.20	1795.56
10.6	8.6	5	0.50	0.50	0.40	19.00	3.55	168.9	25.00	504.43	648.89	509.64	2037.41
10.7	8.7	5	0.50	0.50	0.40	19.00	3.55	170.8	25.00	512.29	650.72	511.08	2007.96
10.8	8.8	5	0.50	0.50	0.40	19.00	3.55	172.8	25.00	520.14	652.55	512.51	1978.41
10.9	8.9	5	0.50	0.50	0.40	19.00	3.55	174.8	25.00	528.00	654.39	513.95	2226.38
11.0	9.0	5	0.50	0.50	0.40	19.00	3.54	176.7	25.00	535.85	656.22	515.39	2476.39
11.1	9.1	6	0.70	0.50	0.86	37.70	45.15	178.7	46.91	550.59	4924.89	3868.00	2734.41
11.2	9.2	6	0.70	0.50	0.86	37.70	45.13	180.6	47.32	565.45	4965.61	3899.98	2768.90
11.3	9.3	6	0.70	0.50	0.86	37.70	45.11	182.6	47.73	580.45	5006.27	3931.92	2803.46
11.4	9.4	6	0.70	0.50	0.86	37.70	45.09	184.6	48.14	595.57	5046.88	3963.81	2838.11
11.5	9.5	6	0.70	0.50	0.86	37.70	45.07	186.5	48.55	610.82	5087.44	3995.66	2872.84
11.6	9.6	6	0.70	0.50	0.86	37.70	45.04	188.5	48.96	626.21	5127.93	4027.47	2907.64
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	190.5	0.00	626.21	0.00	0.00	2929.04
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	192.4	0.00	626.21	0.00	0.00	3223.75
11.9	9.9	8	0.70	0.50	0.86	37.70	44.98	194.4	50.19	641.97	5249.08	4122.62	3534.27
12.0	10.0	8	0.70	0.50	0.86	37.70	44.95	196.3	50.60	657.87	5289.35	4154.25	3569.38
12.1	10.1	8	0.70	0.50	0.86	37.70	44.93	198.3	51.01	673.90	5329.57	4185.83	3604.58
12.2	10.2	8	0.70	0.50	0.86	37.70	44.91	200.3	51.42	690.05	5369.72	4217.37	3639.85
12.3	10.3	8	0.70	0.50	0.86	37.70	44.89	202.2	51.83	706.33	5409.81	4248.86	3675.19
12.4	10.4	8	0.70	0.50	0.86	37.70	44.86	204.2	52.24	722.75	5449.85	4280.30	3710.61
12.5	10.5	8	0.70	0.50	0.86	37.70	44.84	206.2	52.65	739.29	5489.82	4311.69	3746.11
12.6	10.6	8	0.70	0.50	0.86	37.70	44.82	208.1	53.06	755.96	5529.74	4343.04	3781.69
12.7	10.7	8	0.70	0.50	0.86	37.70	44.79	210.1	53.47	772.76	5569.59	4374.35	3817.34
12.8	10.8	8	0.70	0.50	0.86	37.70	44.77	212.1	53.88	789.69	5609.38	4405.60	3853.06
12.9	10.9	8	0.70	0.50	0.86	37.70	44.75	214.0	54.29	806.74	5649.11	4436.80	3888.86
13.0	11.0	8	0.70	0.50	0.86	37.70	44.72	216.0	54.70	823.93	5688.78	4467.96	3924.74
13.1	11.1	8	0.70	0.50	0.86	37.70	44.70	217.9	55.11	841.24	5728.39	4499.07	3960.69
13.2	11.2	8	0.70	0.50	0.86	37.70	44.68	219.9	55.53	858.69	5767.94	4530.13	3996.71
13.3	11.3	8	0.70	0.50	0.86	37.70	44.65	221.9	55.94	876.26	5807.42	4561.14	4032.81
13.4	11.4	8	0.70	0.50	0.86	37.70	44.63	223.8	56.35	893.96	5846.84	4592.10	4068.98
13.5	11.5	8	0.70	0.50	0.86	37.70	44.60	225.8	56.76	911.79	5886.19	4623.01	4105.23
13.6	11.6	8	0.70	0.50	0.86	37.70	44.58	227.8	57.17	929.75	5925.48	4653.86	4141.55

13.7	11.7	8	0.70	0.50	0.86	37.70	44.55	229.7	57.58	947.84	5964.71	4684.67	4177.94
13.8	11.8	8	0.70	0.50	0.86	37.70	44.53	231.7	57.99	966.06	6003.87	4715.43	3876.35
13.9	11.9	8	0.70	0.50	0.86	37.70	44.50	233.7	58.40	984.40	6042.97	4746.13	3572.81
14.0	12.0	8	0.70	0.50	0.86	37.70	44.48	235.6	58.81	1002.88	6082.00	4776.79	3649.98
14.1	12.1	8	0.70	0.50	0.86	37.70	44.45	237.6	59.22	1021.48	6120.96	4807.39	3727.47
14.2	12.2	8	0.70	0.50	0.86	37.70	44.43	239.5	59.63	1040.22	6159.86	4837.94	3805.28
14.3	12.3	8	0.70	0.50	0.86	37.70	44.40	241.5	60.04	1059.08	6198.68	4868.44	3883.40
14.4	12.4	8	0.70	0.50	0.86	37.70	44.38	243.5	60.45	1078.07	6237.45	4898.88	3961.84
14.5	12.5	8	0.70	0.50	0.86	37.70	44.35	245.4	60.86	1097.19	6276.14	4929.27	4040.59
14.6	12.6	8	0.70	0.50	0.86	37.70	44.33	247.4	61.27	1116.43	6314.76	4959.60	4119.65
14.7	12.7	8	0.70	0.50	0.86	37.70	44.30	249.4	61.68	1135.81	6353.32	4989.89	4199.03
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	251.3	0.00	1135.81	0.00	0.00	4261.75
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	253.3	0.00	1135.81	0.00	0.00	4662.73
15.0	13.0	10	0.70	0.50	0.90	38.85	49.46	255.3	65.51	1156.39	7235.54	5682.78	5083.84
15.1	13.1	10	0.70	0.50	0.90	38.85	49.43	257.2	65.94	1177.11	7278.43	5716.46	5124.60
15.2	13.2	10	0.70	0.50	0.90	38.85	49.41	259.2	66.36	1197.96	7321.24	5750.09	5165.44
15.3	13.3	10	0.70	0.50	0.90	38.85	49.38	261.1	66.79	1218.94	7363.97	5783.65	5206.35
15.4	13.4	10	0.70	0.50	0.90	38.85	49.35	263.1	67.22	1240.06	7406.62	5817.15	5247.32
15.5	13.5	10	0.70	0.50	0.90	38.85	49.32	265.1	67.65	1261.31	7449.19	5850.58	5288.37
15.6	13.6	10	0.70	0.50	0.90	38.85	49.29	267.0	68.07	1282.69	7491.69	5883.96	5329.48
15.7	13.7	10	0.70	0.50	0.90	38.85	49.26	269.0	68.50	1304.21	7534.10	5917.27	5370.66
15.8	13.8	10	0.70	0.50	0.90	38.85	49.23	271.0	68.93	1325.87	7576.42	5950.51	5411.91
15.9	13.9	10	0.70	0.50	0.90	38.85	49.20	272.9	69.35	1347.66	7618.67	5983.69	5028.19
16.0	14.0	10	0.70	0.50	0.90	38.85	49.16	274.9	69.78	1369.58	7660.84	6016.81	4642.34
16.1	14.1	10	0.70	0.50	0.90	38.85	49.13	276.9	70.21	1391.64	7702.92	6049.86	4254.39
16.2	14.2	10	0.70	0.50	0.90	38.85	49.10	278.8	70.64	1413.83	7744.91	6082.84	3864.32
16.3	14.3	10	0.70	0.50	0.90	38.85	49.07	280.8	71.06	1436.15	7786.83	6115.76	3472.15
16.4	14.4	10	0.70	0.50	0.90	38.85	49.04	282.7	71.49	1458.61	7828.65	6148.61	3077.89
16.5	14.5	10	0.70	0.50	0.90	38.85	49.01	284.7	71.92	1481.21	7870.40	6181.39	3073.06
16.6	14.6	10	0.70	0.50	0.90	38.85	48.98	286.7	72.35	1503.93	7912.05	6214.11	3068.07
16.7	14.7	10	0.70	0.50	0.90	38.85	48.95	288.6	72.77	1526.80	7953.62	6246.76	3062.91
16.8	14.8	10	0.70	0.50	0.90	38.85	48.91	290.6	73.20	1549.79	7995.11	6279.34	3057.58
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1549.79	0.00	0.00	2632.77
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1549.79	0.00	0.00	2630.80

1.1.2.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1882	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	1.3	10.43	2.62	732.75	368.32	281.15
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	2.5	10.76	5.33	756.18	380.10	271.71
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	3.8	11.10	8.11	779.60	391.87	261.62
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	5.0	11.43	10.99	803.02	403.64	250.86
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	6.3	11.76	13.94	826.45	415.42	239.45
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	7.5	12.10	16.98	849.87	427.19	227.39
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	8.8	12.43	20.11	873.29	438.97	214.66
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	10.1	12.76	23.31	896.72	450.74	201.28
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	11.3	13.10	26.61	920.14	462.51	187.23
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	12.6	23.20	32.44	417.95	210.08	174.67
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	13.8	23.20	38.27	419.78	211.00	179.17
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	15.1	23.20	44.10	421.61	211.93	183.66
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	16.3	23.20	49.93	423.45	212.85	188.16
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	17.6	23.20	55.76	425.28	213.77	177.64
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	18.8	23.20	61.59	427.11	214.69	167.06
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	20.1	23.20	67.42	428.95	215.61	156.41
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	21.4	23.20	73.25	430.78	216.53	145.71
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	22.6	23.20	79.08	432.61	217.45	134.94
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	23.9	23.20	84.91	434.45	218.38	124.11
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	25.1	23.20	90.75	436.28	219.30	113.22
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	26.4	23.20	96.58	438.11	220.22	102.26
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	27.6	23.20	102.41	439.94	221.14	91.25

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	28.9	23.20	108.24	441.78	222.06	80.17
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	30.2	0.00	108.24	0.00	0.00	63.96
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	31.4	0.00	108.24	0.00	0.00	62.70
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	32.7	0.00	108.24	0.00	0.00	61.45
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	33.9	0.00	108.24	0.00	0.00	60.19
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	35.2	0.00	108.24	0.00	0.00	58.93
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	36.4	0.00	108.24	0.00	0.00	57.68
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	37.7	0.00	108.24	0.00	0.00	75.53
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	39.0	0.00	108.24	0.00	0.00	93.45
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	40.2	0.00	108.24	0.00	0.00	111.42
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	108.24	0.00	0.00	129.46
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	108.24	0.00	0.00	147.56
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	108.24	0.00	0.00	165.73
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	108.24	0.00	0.00	183.95
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	108.24	0.00	0.00	202.24
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	108.24	0.00	0.00	220.59
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	108.24	0.00	0.00	239.00
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	50.3	25.00	114.52	564.57	283.78	262.94
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	51.5	25.00	120.80	566.40	284.71	267.83
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	52.8	25.00	127.09	568.24	285.63	272.72
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	54.0	25.00	133.37	570.07	286.55	277.61
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	55.3	25.00	139.65	571.90	287.47	282.50
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	56.5	25.00	145.94	573.74	288.39	287.39
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	57.8	25.00	152.22	575.57	289.31	292.28
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	59.1	25.00	158.50	577.40	290.23	297.17
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	60.3	25.00	164.79	579.23	291.15	302.06
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	61.6	25.00	171.07	581.07	292.08	306.95
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	62.8	25.00	177.35	582.90	293.00	311.84
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	64.1	25.00	183.64	584.73	293.92	316.72
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	65.3	25.00	189.92	586.57	294.84	321.61
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	66.6	25.00	196.20	588.40	295.76	326.50
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	67.9	25.00	202.49	590.23	296.68	331.39
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	69.1	25.00	208.77	592.07	297.60	336.28
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	70.4	25.00	215.05	593.90	298.53	341.17
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	71.6	25.00	221.33	595.73	299.45	346.06
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	72.9	25.00	227.62	597.56	300.37	350.95
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	74.1	25.00	233.90	599.40	301.29	355.84
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	75.4	25.00	240.18	601.23	302.21	360.73
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	76.7	25.00	246.47	603.06	303.13	365.62
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	77.9	25.00	252.75	604.90	304.05	370.51
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	79.2	25.00	259.03	606.73	304.98	375.40
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	80.4	25.00	265.32	608.56	305.90	380.29
8.5	6.5	5	0.50	0.50	0.40	19.00	3.56	81.7	25.00	271.60	610.40	306.82	385.18
8.6	6.6	5	0.50	0.50	0.40	19.00	3.56	82.9	25.00	277.88	612.23	307.74	390.07
8.7	6.7	5	0.50	0.50	0.40	19.00	3.56	84.2	25.00	284.17	614.06	308.66	394.96
8.8	6.8	5	0.50	0.50	0.40	19.00	3.56	85.5	25.00	290.45	615.89	309.58	399.85
8.9	6.9	5	0.50	0.50	0.40	19.00	3.55	86.7	25.00	296.73	617.73	310.50	404.74

9.0	7.0	5	0.50	0.50	0.40	19.00	3.55	88.0	25.00	303.02	619.56	311.42	409.63
9.1	7.1	5	0.50	0.50	0.40	19.00	3.55	89.2	25.00	309.30	621.39	312.35	414.51
9.2	7.2	5	0.50	0.50	0.40	19.00	3.54	90.5	25.00	315.58	623.23	313.27	419.40
9.3	7.3	5	0.50	0.50	0.40	19.00	3.54	91.7	25.00	321.87	625.06	314.19	424.29
9.4	7.4	5	0.50	0.50	0.40	19.00	3.54	93.0	25.00	328.15	626.89	315.11	429.18
9.5	7.5	5	0.50	0.50	0.40	19.00	3.53	94.2	25.00	334.43	628.73	316.03	434.07
9.6	7.6	5	0.50	0.50	0.40	19.00	3.53	95.5	25.00	340.72	630.56	316.95	438.96
9.7	7.7	5	0.50	0.50	0.40	19.00	3.53	96.8	25.00	347.00	632.39	317.87	443.85
9.8	7.8	5	0.50	0.50	0.40	19.00	3.52	98.0	25.00	353.28	634.22	318.80	448.74
9.9	7.9	5	0.50	0.50	0.40	19.00	3.52	99.3	25.00	359.56	636.06	319.72	453.63
10.0	8.0	5	0.50	0.50	0.40	19.00	3.52	100.5	25.00	365.85	637.89	320.64	458.52
10.1	8.1	5	0.50	0.50	0.40	19.00	3.51	101.8	25.00	372.13	639.72	321.56	605.92
10.2	8.2	5	0.50	0.50	0.40	19.00	3.51	103.0	25.00	378.41	641.56	322.48	754.59
10.3	8.3	5	0.50	0.50	0.40	19.00	3.51	104.3	25.00	384.70	643.39	323.40	904.52
10.4	8.4	5	0.50	0.50	0.40	19.00	3.50	105.6	25.00	390.98	645.22	324.32	1055.71
10.5	8.5	5	0.50	0.50	0.40	19.00	3.50	106.8	25.00	397.26	647.06	325.25	1208.16
10.6	8.6	5	0.50	0.50	0.40	19.00	3.50	108.1	25.00	403.55	648.89	326.17	1361.86
10.7	8.7	5	0.50	0.50	0.40	19.00	3.49	109.3	25.00	409.83	650.72	327.09	1344.10
10.8	8.8	5	0.50	0.50	0.40	19.00	3.49	110.6	25.00	416.11	652.55	328.01	1326.28
10.9	8.9	5	0.50	0.50	0.40	19.00	3.49	111.8	25.00	422.40	654.39	328.93	1483.73
11.0	9.0	5	0.50	0.50	0.40	19.00	3.48	113.1	25.00	428.68	656.22	329.85	1642.42
11.1	9.1	6	0.70	0.50	0.86	37.70	44.63	114.4	46.91	440.47	4868.30	2447.07	1807.14
11.2	9.2	6	0.70	0.50	0.86	37.70	44.60	115.6	47.32	452.36	4907.53	2466.79	1830.68
11.3	9.3	6	0.70	0.50	0.86	37.70	44.57	116.9	47.73	464.36	4946.67	2486.47	1854.27
11.4	9.4	6	0.70	0.50	0.86	37.70	44.54	118.1	48.14	476.46	4985.74	2506.10	1877.93
11.5	9.5	6	0.70	0.50	0.86	37.70	44.51	119.4	48.55	488.66	5024.72	2525.70	1901.63
11.6	9.6	6	0.70	0.50	0.86	37.70	44.48	120.6	48.96	500.96	5063.62	2545.25	1925.40
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	121.9	0.00	500.96	0.00	0.00	1938.44
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	123.2	0.00	500.96	0.00	0.00	2124.15
11.9	9.9	8	0.70	0.50	0.86	37.70	44.38	124.4	50.19	513.58	5179.80	2603.65	2322.11
12.0	10.0	8	0.70	0.50	0.86	37.70	44.35	125.7	50.60	526.30	5218.36	2623.04	2346.10
12.1	10.1	8	0.70	0.50	0.86	37.70	44.32	126.9	51.01	539.12	5256.83	2642.37	2370.15
12.2	10.2	8	0.70	0.50	0.86	37.70	44.29	128.2	51.42	552.04	5295.22	2661.67	2394.26
12.3	10.3	8	0.70	0.50	0.86	37.70	44.25	129.4	51.83	565.07	5333.52	2680.92	2418.42
12.4	10.4	8	0.70	0.50	0.86	37.70	44.22	130.7	52.24	578.20	5371.72	2700.12	2442.64
12.5	10.5	8	0.70	0.50	0.86	37.70	44.19	131.9	52.65	591.43	5409.84	2719.28	2466.91
12.6	10.6	8	0.70	0.50	0.86	37.70	44.15	133.2	53.06	604.77	5447.87	2738.40	2491.23
12.7	10.7	8	0.70	0.50	0.86	37.70	44.12	134.5	53.47	618.21	5485.81	2757.47	2515.62
12.8	10.8	8	0.70	0.50	0.86	37.70	44.09	135.7	53.88	631.75	5523.66	2776.49	2540.05
12.9	10.9	8	0.70	0.50	0.86	37.70	44.05	137.0	54.29	645.40	5561.41	2795.47	2564.54
13.0	11.0	8	0.70	0.50	0.86	37.70	44.02	138.2	54.70	659.14	5599.07	2814.40	2589.09
13.1	11.1	8	0.70	0.50	0.86	37.70	43.98	139.5	55.11	673.00	5636.64	2833.28	2613.68
13.2	11.2	8	0.70	0.50	0.86	37.70	43.95	140.7	55.53	686.95	5674.11	2852.12	2638.33
13.3	11.3	8	0.70	0.50	0.86	37.70	43.91	142.0	55.94	701.01	5711.49	2870.91	2663.04
13.4	11.4	8	0.70	0.50	0.86	37.70	43.88	143.3	56.35	715.17	5748.78	2889.65	2687.79
13.5	11.5	8	0.70	0.50	0.86	37.70	43.84	144.5	56.76	729.43	5785.96	2908.34	2712.60
13.6	11.6	8	0.70	0.50	0.86	37.70	43.81	145.8	57.17	743.80	5823.05	2926.99	2737.46

13.7	11.7	8	0.70	0.50	0.86	37.70	43.77	147.0	57.58	758.27	5860.04	2945.58	2762.37
13.8	11.8	8	0.70	0.50	0.86	37.70	43.74	148.3	57.99	772.85	5896.94	2964.12	2575.43
13.9	11.9	8	0.70	0.50	0.86	37.70	43.70	149.5	58.40	787.52	5933.73	2982.62	2387.34
14.0	12.0	8	0.70	0.50	0.86	37.70	43.66	150.8	58.81	802.30	5970.43	3001.06	2438.07
14.1	12.1	8	0.70	0.50	0.86	37.70	43.63	152.1	59.22	817.19	6007.02	3019.46	2489.09
14.2	12.2	8	0.70	0.50	0.86	37.70	43.59	153.3	59.63	832.17	6043.51	3037.80	2540.39
14.3	12.3	8	0.70	0.50	0.86	37.70	43.55	154.6	60.04	847.26	6079.90	3056.09	2591.99
14.4	12.4	8	0.70	0.50	0.86	37.70	43.51	155.8	60.45	862.45	6116.19	3074.33	2643.88
14.5	12.5	8	0.70	0.50	0.86	37.70	43.48	157.1	60.86	877.75	6152.37	3092.52	2696.07
14.6	12.6	8	0.70	0.50	0.86	37.70	43.44	158.3	61.27	893.15	6188.45	3110.66	2748.55
14.7	12.7	8	0.70	0.50	0.86	37.70	43.40	159.6	61.68	908.65	6224.43	3128.74	2801.33
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	160.8	0.00	908.65	0.00	0.00	2840.84
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	162.1	0.00	908.65	0.00	0.00	3092.46
15.0	13.0	10	0.70	0.50	0.90	38.85	48.47	163.4	65.51	925.11	7089.94	3563.79	3359.83
15.1	13.1	10	0.70	0.50	0.90	38.85	48.44	164.6	65.94	941.69	7132.46	3585.17	3388.73
15.2	13.2	10	0.70	0.50	0.90	38.85	48.42	165.9	66.36	958.36	7174.94	3606.52	3417.70
15.3	13.3	10	0.70	0.50	0.90	38.85	48.39	167.1	66.79	975.15	7217.36	3627.84	3446.76
15.4	13.4	10	0.70	0.50	0.90	38.85	48.37	168.4	67.22	992.05	7259.74	3649.14	3475.88
15.5	13.5	10	0.70	0.50	0.90	38.85	48.34	169.6	67.65	1009.05	7302.08	3670.42	3505.09
15.6	13.6	10	0.70	0.50	0.90	38.85	48.32	170.9	68.07	1026.16	7344.36	3691.68	3534.37
15.7	13.7	10	0.70	0.50	0.90	38.85	48.29	172.2	68.50	1043.37	7386.61	3712.91	3563.72
15.8	13.8	10	0.70	0.50	0.90	38.85	48.27	173.4	68.93	1060.69	7428.80	3734.12	3593.16
15.9	13.9	10	0.70	0.50	0.90	38.85	48.24	174.7	69.35	1078.13	7470.95	3755.31	3355.60
16.0	14.0	10	0.70	0.50	0.90	38.85	48.22	175.9	69.78	1095.66	7513.05	3776.47	3116.71
16.1	14.1	10	0.70	0.50	0.90	38.85	48.19	177.2	70.21	1113.31	7555.11	3797.61	2876.49
16.2	14.2	10	0.70	0.50	0.90	38.85	48.17	178.4	70.64	1131.06	7597.12	3818.73	2634.94
16.3	14.3	10	0.70	0.50	0.90	38.85	48.14	179.7	71.06	1148.92	7639.09	3839.83	2392.06
16.4	14.4	10	0.70	0.50	0.90	38.85	48.12	181.0	71.49	1166.89	7681.01	3860.90	2147.85
16.5	14.5	10	0.70	0.50	0.90	38.85	48.09	182.2	71.92	1184.96	7722.88	3881.95	2148.57
16.6	14.6	10	0.70	0.50	0.90	38.85	48.07	183.5	72.35	1203.15	7764.71	3902.97	2149.22
16.7	14.7	10	0.70	0.50	0.90	38.85	48.04	184.7	72.77	1221.44	7806.50	3923.97	2149.79
16.8	14.8	10	0.70	0.50	0.90	38.85	48.02	186.0	73.20	1239.83	7848.23	3944.95	2150.30
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	187.2	0.00	1239.83	0.00	0.00	1883.39
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	188.5	0.00	1239.83	0.00	0.00	1882.13

1.1.3 Calcolo del carico limite con riferimento alla prova CPT1_2012

1.1.3.1 Condizioni statiche

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.1**	**19.35**	**40**		0.70	0.50	0.84
2	**1.1**	**2.5**	**18.33**	**22**	**86**	0.35	0.50	0.40
3	**2.5**	**3.6**	**19.35**	**40**		0.70	0.50	0.84
4	**3.6**	**3.8**	**19.35**	**36**		0.70	0.50	0.73
5	**3.8**	**4.0**	**19.35**	**40**		0.70	0.50	0.84
6	**4.0**	**5.0**	**18.33**	**22**	**40**	0.58	0.50	0.40
7	**5.0**	**5.5**	**19.35**	**36**		0.70	0.50	0.73
8	**5.5**	**10.0**	**18.33**	**22**	**34**	0.63	0.50	0.40
9	**10.0**	**10.4**	**19.35**	**40**		0.70	0.50	0.83
10	**10.4**	**11.2**	**19.35**	**37**		0.70	0.50	0.76
11	**11.2**	**30.0**	**19.35**	**41**		0.70	0.50	0.86

1.1.3.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7709	7550

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.8	30.10	11.35	813.62	920.18	1014.97	5.82	2.20	102.82	116.29	737.26
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	5.7	30.10	22.69	815.45	922.25	1087.07	5.99	4.46	105.86	119.73	855.59
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	8.5	30.10	34.04	817.28	924.32	1162.14	6.17	6.78	108.90	123.16	976.85
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	11.3	30.10	45.39	819.11	926.40	1240.18	6.34	9.17	111.94	126.60	1101.06
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	14.1	30.10	56.74	820.95	928.47	1321.20	6.51	11.62	114.98	130.04	1228.20
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	17.0	13.98	62.01	1422.45	1608.75	1399.91	13.98	16.90	1422.45	1608.75	1360.68
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	19.8	14.39	67.43	1463.34	1654.99	1386.60	14.39	22.32	1463.34	1654.99	1347.37
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	22.6	14.79	73.01	1504.23	1701.24	1372.34	14.79	27.90	1504.23	1701.24	1333.11
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	25.4	15.19	78.74	1545.12	1747.49	1408.75	15.19	33.62	1545.12	1747.49	1369.52
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	28.3	15.59	84.61	1586.01	1793.73	1445.29	15.59	39.50	1586.01	1793.73	1406.06
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	31.1	16.00	90.64	1626.90	1839.98	1360.26	16.00	45.53	1626.90	1839.98	1300.56
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	33.9	16.40	96.83	1667.79	1886.23	1272.38	16.40	51.71	1667.79	1886.23	1192.31
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	36.8	16.80	103.16	1708.68	1932.47	1181.67	16.80	58.05	1708.68	1932.47	1081.31
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	39.6	17.20	109.64	1749.57	1978.72	1088.11	17.20	64.53	1749.57	1978.72	967.56
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	42.4	17.60	116.28	1790.47	2024.97	991.70	17.60	71.17	1790.47	2024.97	851.06
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	45.2	18.01	123.07	1831.36	2071.22	892.46	18.01	77.95	1831.36	2071.22	731.81
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	48.1	15.93	129.07	1222.88	1383.04	789.56	15.93	83.96	1222.88	1383.04	608.99
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	50.9	16.27	135.21	1249.59	1413.25	733.25	16.27	90.09	1249.59	1413.25	532.86
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	53.7	19.21	142.45	1954.03	2209.96	676.01	19.21	97.34	1954.03	2209.96	455.89
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	56.5	19.61	149.84	1994.92	2256.20	565.40	19.61	104.73	1994.92	2256.20	325.63
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	59.4	23.20	158.59	437.81	495.15	537.68	9.57	108.34	169.07	191.21	293.45
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	62.2	23.20	167.34	439.64	497.22	630.58	9.75	112.01	172.10	194.65	402.41

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	65.0	23.20	176.08	441.47	499.29	725.38	9.92	115.75	175.14	198.08	513.23
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	67.9	23.20	184.83	443.30	501.37	822.08	10.09	119.56	178.18	201.52	625.91
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	70.7	23.20	193.57	445.14	503.44	920.67	10.26	123.43	181.22	204.96	740.45
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	73.5	23.20	202.32	446.97	505.51	922.91	10.43	127.36	184.26	208.40	743.73
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	76.3	23.20	211.07	448.80	507.58	925.15	10.61	131.36	187.30	211.83	747.06
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	79.2	23.20	219.81	450.64	509.66	927.39	10.78	135.42	190.34	215.27	750.45
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	82.0	23.20	228.56	452.47	511.73	929.63	10.95	139.55	193.38	218.71	753.90
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	84.8	23.20	237.30	454.30	513.80	931.87	11.12	143.74	196.42	222.14	757.40
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	87.7	20.42	245.00	1568.24	1773.64	933.20	20.42	151.44	1568.24	1773.64	763.96
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	90.5	20.77	252.84	1594.95	1803.85	849.94	20.77	159.27	1594.95	1803.85	666.38
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	93.3	21.12	260.80	1621.66	1834.05	764.91	21.12	167.24	1621.66	1834.05	567.11
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	96.1	21.47	268.89	1648.37	1864.26	678.09	21.47	175.33	1648.37	1864.26	466.15
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	99.0	21.82	277.11	1675.07	1894.46	589.50	21.82	183.55	1675.07	1894.46	363.51
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	101.8	21.35	285.16	411.81	465.75	498.86	12.26	188.17	216.47	244.83	255.93
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	104.6	21.35	293.21	413.64	467.82	504.56	12.43	192.86	219.51	248.26	259.72
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	107.4	21.35	301.26	415.48	469.89	510.27	12.60	197.61	222.55	251.70	263.57
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	110.3	21.35	309.31	417.31	471.97	515.98	12.78	202.43	225.59	255.14	267.48
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	113.1	21.35	317.36	419.14	474.04	521.69	12.95	207.31	228.63	258.58	271.44
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	115.9	21.35	325.41	420.98	476.11	527.39	13.12	212.26	231.67	262.01	275.46
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	118.8	21.35	333.46	422.81	478.18	533.10	13.29	217.27	234.71	265.45	279.54
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	121.6	21.35	341.51	424.64	480.26	538.81	13.46	222.34	237.75	268.89	283.67
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	124.4	21.35	349.56	426.47	482.33	544.52	13.64	227.48	240.79	272.33	287.86
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	127.2	21.35	357.61	428.31	484.40	550.23	13.81	232.69	243.83	275.76	292.10
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	130.1	21.35	365.66	430.14	486.48	555.93	13.98	237.96	246.87	279.20	296.40
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	132.9	21.35	373.71	431.97	488.55	561.64	14.15	243.29	249.91	282.64	300.76
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	135.7	21.35	381.76	433.81	490.62	567.35	14.32	248.69	252.95	286.07	305.18
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	138.5	21.35	389.81	435.64	492.70	573.06	14.50	254.16	255.98	289.51	309.65
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	397.86	437.47	494.77	578.76	14.67	259.69	259.02	292.95	314.18
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	144.2	21.35	405.91	439.31	496.84	584.47	14.84	265.28	262.06	296.39	318.76
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	147.0	21.35	413.96	441.14	498.92	590.18	15.01	270.94	265.10	299.82	323.40
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	149.9	21.35	422.01	442.97	500.99	595.89	15.18	276.67	268.14	303.26	328.10
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	152.7	21.35	430.05	444.80	503.06	601.60	15.36	282.46	271.18	306.70	332.85
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	155.5	21.35	438.10	446.64	505.13	607.30	15.53	288.31	274.22	310.14	337.66
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	158.3	21.35	446.15	448.47	507.21	613.01	15.70	294.23	277.26	313.57	342.52
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	161.2	21.35	454.20	450.30	509.28	618.72	15.87	300.22	280.30	317.01	347.45
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	164.0	21.35	462.25	452.14	511.35	624.43	16.05	306.26	283.34	320.45	352.43
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	166.8	21.35	470.30	453.97	513.43	630.13	16.22	312.38	286.38	323.89	357.46
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	169.6	21.35	478.35	455.80	515.50	635.84	16.39	318.56	289.42	327.32	362.55
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	172.5	21.35	486.40	457.64	517.57	641.55	16.56	324.80	292.46	330.76	367.70
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	175.3	21.35	494.45	459.47	519.65	647.26	16.73	331.11	295.50	334.20	372.90
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	178.1	21.35	502.50	461.30	521.72	652.97	16.91	337.48	298.53	337.63	378.17
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	181.0	21.35	510.55	463.13	523.79	658.67	17.08	343.92	301.57	341.07	383.48
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	183.8	21.35	518.60	464.97	525.87	664.38	17.25	350.42	304.61	344.51	388.86
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	186.6	21.35	526.65	466.80	527.94	670.09	17.42	356.99	307.65	347.95	394.29
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	189.4	21.35	534.70	468.63	530.01	675.80	17.59	363.63	310.69	351.38	399.77
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	192.3	21.35	542.75	470.47	532.08	681.50	17.77	370.32	313.73	354.82	405.32
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	195.1	21.35	550.80	472.30	534.16	687.21	17.94	377.09	316.77	358.26	410.92

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	197.9	21.35	558.85	474.13	536.23	692.92	18.11	383.91	319.81	361.70	416.57
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	200.7	21.35	566.90	475.97	538.30	966.36	18.28	390.81	322.85	365.13	700.76
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	203.6	21.35	574.95	477.80	540.38	1242.59	18.46	397.76	325.89	368.57	987.70
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	206.4	21.35	583.00	479.63	542.45	1521.63	18.63	404.79	328.93	372.01	1277.42
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	209.2	21.35	591.05	481.46	544.52	1803.46	18.80	411.87	331.97	375.45	1569.89
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	212.1	21.35	599.09	483.30	546.60	2020.12	18.97	419.03	335.01	378.88	1797.16
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	214.9	21.35	607.14	485.13	548.67	2238.95	19.14	426.24	338.05	382.32	2026.56
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	217.7	21.35	615.19	486.96	550.74	2459.95	19.32	433.52	341.08	385.76	2258.09
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	220.5	21.35	623.24	488.80	552.82	2683.12	19.49	440.87	344.12	389.19	2491.76
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	223.4	21.35	631.29	490.63	554.89	2908.46	19.66	448.28	347.16	392.63	2727.56
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	226.2	21.35	639.34	492.46	556.96	3135.97	19.83	455.76	350.20	396.07	2965.49
10.1	8.1	9	0.70	0.50	0.83	36.55	40.45	229.0	40.93	654.77	4009.66	4534.81	3372.06	40.93	471.19	4009.66	4534.81	3212.42
10.2	8.2	9	0.70	0.50	0.83	36.55	40.45	231.8	41.32	670.35	4048.24	4578.46	3342.72	41.32	486.77	4048.24	4578.46	3183.09
10.3	8.3	9	0.70	0.50	0.83	36.55	40.45	234.7	41.72	686.08	4086.83	4622.10	3427.41	41.72	502.49	4086.83	4622.10	3267.77
10.4	8.4	9	0.70	0.50	0.83	36.55	40.45	237.5	42.11	701.95	4125.42	4665.74	3512.58	42.11	518.37	4125.42	4665.74	3352.94
10.5	8.5	10	0.70	0.50	0.76	34.25	31.78	240.3	39.14	716.71	3271.49	3699.97	3597.14	39.14	533.13	3271.49	3699.97	3437.50
10.6	8.6	10	0.70	0.50	0.76	34.25	31.78	243.2	39.50	731.60	3301.81	3734.26	3750.14	39.50	548.02	3301.81	3734.26	3590.51
10.7	8.7	10	0.70	0.50	0.76	34.25	31.78	246.0	39.86	746.63	3332.13	3768.55	3904.11	39.86	563.05	3332.13	3768.55	3744.47
10.8	8.8	10	0.70	0.50	0.76	34.25	31.78	248.8	40.23	761.79	3362.45	3802.84	4059.04	40.23	578.21	3362.45	3802.84	3899.40
10.9	8.9	10	0.70	0.50	0.76	34.25	31.78	251.6	40.59	777.10	3392.76	3837.12	4214.92	40.59	593.51	3392.76	3837.12	4055.28
11.0	9.0	10	0.70	0.50	0.76	34.25	31.78	254.5	40.95	792.54	3423.08	3871.41	4371.76	40.95	608.95	3423.08	3871.41	4212.12
11.1	9.1	10	0.70	0.50	0.76	34.25	31.78	257.3	41.32	808.11	3453.40	3905.70	4529.54	41.32	624.53	3453.40	3905.70	4369.90
11.2	9.2	10	0.70	0.50	0.76	34.25	31.78	260.1	41.68	823.82	3483.72	3939.99	4688.27	41.68	640.24	3483.72	3939.99	4528.63
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	47.55	841.75	5017.74	5674.93	4849.75	47.55	658.17	5017.74	5674.93	4690.11
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	47.96	859.83	5061.03	5723.89	4897.66	47.96	676.25	5061.03	5723.89	4738.02
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	48.37	878.07	5104.32	5772.85	4945.53	48.37	694.49	5104.32	5772.85	4785.90
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	48.79	896.46	5147.61	5821.81	4993.37	48.79	712.88	5147.61	5821.81	4833.73
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	49.20	915.01	5189.00	5868.62	5041.16	49.20	731.42	5189.00	5868.62	4881.52
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	49.61	933.71	5230.34	5915.37	5089.05	49.61	750.13	5230.34	5915.37	4929.41
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.02	952.56	5271.64	5962.08	5137.03	50.02	768.98	5271.64	5962.08	4977.40
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	50.43	971.58	5312.89	6008.74	5185.12	50.43	787.99	5312.89	6008.74	5025.48
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	50.84	990.74	5354.11	6055.35	5233.30	50.84	807.16	5354.11	6055.35	5073.66
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	51.25	1010.06	5395.28	6101.92	5281.58	51.25	826.48	5395.28	6101.92	5121.94
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	51.66	1029.53	5436.41	6148.43	5329.96	51.66	845.95	5436.41	6148.43	5170.32
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.07	1049.16	5477.49	6194.90	5378.43	52.07	865.58	5477.49	6194.90	5218.80
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	52.48	1068.95	5518.54	6241.32	5427.01	52.48	885.36	5518.54	6241.32	5267.37
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	52.89	1088.88	5559.53	6287.68	5475.67	52.89	905.30	5559.53	6287.68	5316.04
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	53.30	1108.98	5600.49	6334.00	5524.44	53.30	925.39	5600.49	6334.00	5364.80
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	53.71	1129.23	5641.40	6380.27	5573.30	53.71	945.64	5641.40	6380.27	5413.66
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	54.12	1149.63	5682.26	6426.49	5622.26	54.12	966.04	5682.26	6426.49	5462.62
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	54.53	1170.18	5723.08	6472.65	5671.31	54.53	986.60	5723.08	6472.65	5511.67
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	54.94	1190.90	5763.86	6518.77	5720.46	54.94	1007.31	5763.86	6518.77	5560.82
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	55.35	1211.76	5804.58	6564.83	5769.70	55.35	1028.18	5804.58	6564.83	5610.06
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	55.76	1232.78	5845.27	6610.84	5819.04	55.76	1049.20	5845.27	6610.84	5659.40
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	56.17	1253.96	5885.90	6656.80	5868.47	56.17	1070.38	5885.90	6656.80	5708.83
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	56.58	1275.29	5926.50	6702.71	5918.00	56.58	1091.71	5926.50	6702.71	5758.36
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	56.99	1296.78	5967.04	6748.56	5967.62	56.99	1113.19	5967.04	6748.56	5807.98

13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	57.40	1318.41	6007.54	6794.36	6017.34	57.40	1134.83	6007.54	6794.36	5857.70
13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	57.81	1340.21	6047.99	6840.11	6067.15	57.81	1156.63	6047.99	6840.11	5907.51
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	58.22	1362.16	6088.39	6885.81	6117.05	58.22	1178.57	6088.39	6885.81	5957.41
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	58.63	1384.26	6128.75	6931.45	6167.05	58.63	1200.68	6128.75	6931.45	6007.41
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.04	1406.52	6169.05	6977.03	6217.14	59.04	1222.94	6169.05	6977.03	6057.50
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	59.45	1428.93	6209.31	7022.57	6267.32	59.45	1245.35	6209.31	7022.57	6107.68
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	59.86	1451.50	6249.52	7068.04	6317.59	59.86	1267.92	6249.52	7068.04	6157.96
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	60.27	1474.22	6289.68	7113.47	6367.96	60.27	1290.64	6289.68	7113.47	6208.32
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	60.68	1497.10	6329.80	7158.83	6418.42	60.68	1313.52	6329.80	7158.83	6258.78
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.09	1520.13	6369.86	7204.14	6468.97	61.09	1336.55	6369.86	7204.14	6309.34
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	61.50	1543.32	6409.87	7249.40	6519.62	61.50	1359.74	6409.87	7249.40	6359.98
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	61.91	1566.66	6449.84	7294.59	6570.35	61.91	1383.08	6449.84	7294.59	6410.71
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.32	1590.16	6489.75	7339.73	6621.18	62.32	1406.57	6489.75	7339.73	6461.54
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	62.73	1613.81	6529.61	7384.82	6672.10	62.73	1430.22	6529.61	7384.82	6512.46
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.15	1637.61	6569.43	7429.85	6723.10	63.15	1454.03	6569.43	7429.85	6563.47
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	63.56	1661.57	6609.19	7474.81	6774.20	63.56	1477.99	6609.19	7474.81	6614.56
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	63.97	1685.69	6648.90	7519.72	6825.39	63.97	1502.10	6648.90	7519.72	6665.75
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.38	1709.96	6688.55	7564.58	6876.67	64.38	1526.37	6688.55	7564.58	6717.03
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	64.79	1734.38	6728.16	7609.37	6928.04	64.79	1550.80	6728.16	7609.37	6768.40
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.20	1758.96	6767.71	7654.10	6979.50	65.20	1575.37	6767.71	7654.10	6819.86
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	65.61	1783.69	6807.22	7698.78	7031.04	65.61	1600.11	6807.22	7698.78	6871.41
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.02	1808.58	6846.66	7743.39	7082.68	66.02	1625.00	6846.66	7743.39	6923.04
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.43	1833.62	6886.06	7787.95	7134.40	66.43	1650.04	6886.06	7787.95	6974.77
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	66.84	1858.82	6925.40	7832.44	7186.22	66.84	1675.24	6925.40	7832.44	7026.58
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.25	1884.17	6964.69	7876.88	7238.12	67.25	1700.59	6964.69	7876.88	7078.48
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	67.66	1909.68	7003.92	7921.25	7290.11	67.66	1726.09	7003.92	7921.25	7130.47
16.3	14.3	11	0.70	0.50	0.86	37.70	44.50	404.3	68.07	1935.34	7043.10	7965.56	7342.19	68.07	1751.75	7043.10	7965.56	7182.55
16.4	14.4	11	0.70	0.50	0.86	37.70	44.48	407.2	68.48	1961.15	7082.23	8009.81	7394.35	68.48	1777.57	7082.23	8009.81	7234.72
16.5	14.5	11	0.70	0.50	0.86	37.70	44.46	410.0	68.89	1987.12	7121.30	8054.00	7446.61	68.89	1803.54	7121.30	8054.00	7286.97
16.6	14.6	11	0.70	0.50	0.86	37.70	44.44	412.8	69.30	2013.25	7160.32	8098.13	7498.95	69.30	1829.67	7160.32	8098.13	7339.31
16.7	14.7	11	0.70	0.50	0.86	37.70	44.42	415.6	69.71	2039.53	7199.28	8142.19	7551.37	69.71	1855.95	7199.28	8142.19	7391.73
16.8	14.8	11	0.70	0.50	0.86	37.70	44.39	418.5	70.12	2065.96	7238.18	8186.19	7603.89	70.12	1882.38	7238.18	8186.19	7444.25
16.9	14.9	11	0.70	0.50	0.86	37.70	44.37	421.3	70.53	2092.55	7277.03	8230.12	7656.48	70.53	1908.97	7277.03	8230.12	7496.85
17.0	15.0	11	0.70	0.50	0.86	37.70	44.35	424.1	70.94	2119.30	7315.82	8274.00	7709.17	70.94	1935.71	7315.82	8274.00	7549.53

1.1.3.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5538	5405

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.0	30.10	9.46	813.62	639.01	706.21	5.82	1.83	102.82	80.76	512.25
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	3.9	30.10	18.91	815.45	640.45	757.65	5.99	3.71	105.86	83.14	594.70
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	5.9	30.10	28.37	817.28	641.89	811.15	6.17	5.65	108.90	85.53	679.19
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	7.9	30.10	37.82	819.11	643.33	866.72	6.34	7.64	111.94	87.92	765.73
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	9.8	30.10	47.28	820.95	644.77	924.35	6.51	9.69	114.98	90.30	854.32
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	11.8	13.98	51.67	1422.45	1117.19	979.65	13.98	14.08	1422.45	1117.19	946.96
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	13.7	14.39	56.19	1463.34	1149.30	971.06	14.39	18.60	1463.34	1149.30	938.37
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	15.7	14.79	60.84	1504.23	1181.42	961.83	14.79	23.25	1504.23	1181.42	929.14
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	17.7	15.19	65.61	1545.12	1213.53	987.81	15.19	28.02	1545.12	1213.53	955.12
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	19.6	15.59	70.51	1586.01	1245.65	1013.89	15.59	32.92	1586.01	1245.65	981.20
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	21.6	16.00	75.54	1626.90	1277.76	955.57	16.00	37.94	1626.90	1277.76	908.67
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	23.6	16.40	80.69	1667.79	1309.88	895.29	16.40	43.09	1667.79	1309.88	834.24
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	25.5	16.80	85.97	1708.68	1342.00	833.06	16.80	48.37	1708.68	1342.00	757.92
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	27.5	17.20	91.37	1749.57	1374.11	768.87	17.20	53.78	1749.57	1374.11	679.71
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	29.5	17.60	96.90	1790.47	1406.23	702.73	17.60	59.31	1790.47	1406.23	599.61
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	31.4	18.01	102.56	1831.36	1438.34	634.63	18.01	64.96	1831.36	1438.34	517.61
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	33.4	15.93	107.56	1222.88	960.45	563.89	15.93	69.97	1222.88	960.45	433.05
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	35.3	16.27	112.67	1249.59	981.42	525.53	16.27	75.08	1249.59	981.42	380.92
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	37.3	19.21	118.71	1954.03	1534.69	486.66	19.21	81.11	1954.03	1534.69	328.34
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	39.3	19.61	124.87	1994.92	1566.81	410.73	19.61	87.28	1994.92	1566.81	238.78
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	41.2	23.20	132.16	437.81	343.85	392.54	9.57	90.28	169.07	132.78	216.87
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	43.2	23.20	139.45	439.64	345.29	458.12	9.75	93.35	172.10	135.17	292.98

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	45.2	23.20	146.73	441.47	346.73	525.00	9.92	96.46	175.14	137.56	370.39
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	47.1	23.20	154.02	443.30	348.17	593.21	10.09	99.63	178.18	139.94	449.10
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	49.1	23.20	161.31	445.14	349.61	662.73	10.26	102.86	181.22	142.33	529.11
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	51.1	23.20	168.60	446.97	351.05	665.34	10.43	106.13	184.26	144.72	531.86
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	53.0	23.20	175.89	448.80	352.49	667.96	10.61	109.47	187.30	147.11	534.66
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	55.0	23.20	183.18	450.64	353.93	670.57	10.78	112.85	190.34	149.49	537.50
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	56.9	23.20	190.47	452.47	355.37	673.18	10.95	116.29	193.38	151.88	540.40
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	58.9	23.20	197.75	454.30	356.81	675.79	11.12	119.79	196.42	154.27	543.34
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	60.9	20.42	204.17	1568.24	1231.69	677.64	20.42	126.20	1568.24	1231.69	548.82
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	62.8	20.77	210.70	1594.95	1252.67	620.77	20.77	132.73	1594.95	1252.67	482.00
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	64.8	21.12	217.33	1621.66	1273.65	562.68	21.12	139.36	1621.66	1273.65	414.02
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	66.8	21.47	224.08	1648.37	1294.62	503.37	21.47	146.11	1648.37	1294.62	344.89
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	68.7	21.82	230.93	1675.07	1315.60	442.84	21.82	152.96	1675.07	1315.60	274.60
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	70.7	21.35	237.64	411.81	323.43	380.87	12.26	156.81	216.47	170.02	200.45
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	72.6	21.35	244.34	413.64	324.87	385.80	12.43	160.72	219.51	172.41	203.65
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	74.6	21.35	251.05	415.48	326.31	390.74	12.60	164.68	222.55	174.79	206.90
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	76.6	21.35	257.76	417.31	327.75	395.68	12.78	168.69	225.59	177.18	210.20
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	78.5	21.35	264.47	419.14	329.19	400.61	12.95	172.76	228.63	179.57	213.54
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	80.5	21.35	271.18	420.98	330.63	405.55	13.12	176.88	231.67	181.95	216.93
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	82.5	21.35	277.88	422.81	332.07	410.48	13.29	181.06	234.71	184.34	220.36
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	84.4	21.35	284.59	424.64	333.51	415.42	13.46	185.29	237.75	186.73	223.85
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	86.4	21.35	291.30	426.47	334.95	420.35	13.64	189.57	240.79	189.11	227.37
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	88.4	21.35	298.01	428.31	336.39	425.29	13.81	193.91	243.83	191.50	230.95
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	90.3	21.35	304.72	430.14	337.83	430.23	13.98	198.30	246.87	193.89	234.58
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	92.3	21.35	311.42	431.97	339.27	435.16	14.15	202.75	249.91	196.28	238.25
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	94.2	21.35	318.13	433.81	340.71	440.10	14.32	207.25	252.95	198.66	241.96
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	96.2	21.35	324.84	435.64	342.15	445.03	14.50	211.80	255.98	201.05	245.73
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	98.2	21.35	331.55	437.47	343.59	449.97	14.67	216.41	259.02	203.44	249.54
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	100.1	21.35	338.26	439.31	345.03	454.91	14.84	221.07	262.06	205.82	253.40
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	102.1	21.35	344.96	441.14	346.47	459.84	15.01	225.79	265.10	208.21	257.31
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	104.1	21.35	351.67	442.97	347.91	464.78	15.18	230.56	268.14	210.60	261.26
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	106.0	21.35	358.38	444.80	349.35	469.71	15.36	235.38	271.18	212.99	265.26
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	108.0	21.35	365.09	446.64	350.79	474.65	15.53	240.26	274.22	215.37	269.31
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	110.0	21.35	371.79	448.47	352.23	479.59	15.70	245.19	277.26	217.76	273.40
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	111.9	21.35	378.50	450.30	353.67	484.52	15.87	250.18	280.30	220.15	277.54
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	113.9	21.35	385.21	452.14	355.11	489.46	16.05	255.22	283.34	222.53	281.73
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	115.8	21.35	391.92	453.97	356.55	494.39	16.22	260.32	286.38	224.92	285.96
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	117.8	21.35	398.63	455.80	357.99	499.33	16.39	265.46	289.42	227.31	290.25
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	119.8	21.35	405.33	457.64	359.43	504.26	16.56	270.67	292.46	229.69	294.57
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	121.7	21.35	412.04	459.47	360.87	509.20	16.73	275.92	295.50	232.08	298.95
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	123.7	21.35	418.75	461.30	362.30	514.14	16.91	281.24	298.53	234.47	303.37
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	125.7	21.35	425.46	463.13	363.74	519.07	17.08	286.60	301.57	236.86	307.84
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	127.6	21.35	432.17	464.97	365.18	524.01	17.25	292.02	304.61	239.24	312.36
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	129.6	21.35	438.87	466.80	366.62	528.94	17.42	297.49	307.65	241.63	316.93
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	131.6	21.35	445.58	468.63	368.06	533.88	17.59	303.02	310.69	244.02	321.54
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	133.5	21.35	452.29	470.47	369.50	538.82	17.77	308.60	313.73	246.40	326.19
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	135.5	21.35	459.00	472.30	370.94	543.75	17.94	314.24	316.77	248.79	330.90

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	137.4	21.35	465.71	474.13	372.38	548.69	18.11	319.93	319.81	251.18	335.65
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	139.4	21.35	472.41	475.97	373.82	739.45	18.28	325.67	322.85	253.56	533.74
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	479.12	477.80	375.26	932.06	18.46	331.47	325.89	255.95	733.65
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	143.3	21.35	485.83	479.63	376.70	1126.51	18.63	337.32	328.93	258.34	935.40
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	145.3	21.35	492.54	481.46	378.14	1322.80	18.80	343.23	331.97	260.73	1138.96
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	147.3	21.35	499.25	483.30	379.58	1473.82	18.97	349.19	335.01	263.11	1297.23
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	149.2	21.35	505.95	485.13	381.02	1626.25	19.14	355.20	338.05	265.50	1456.91
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	151.2	21.35	512.66	486.96	382.46	1780.10	19.32	361.27	341.08	267.89	1617.98
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	153.2	21.35	519.37	488.80	383.90	1935.36	19.49	367.39	344.12	270.27	1780.44
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	155.1	21.35	526.08	490.63	385.34	2092.03	19.66	373.57	347.16	272.66	1944.30
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	157.1	21.35	532.79	492.46	386.78	2250.11	19.83	379.80	350.20	275.05	2109.56
10.1	8.1	9	0.70	0.50	0.83	36.55	40.43	159.0	40.93	545.64	4007.84	3147.75	2414.95	40.93	392.66	4007.84	3147.75	2281.92
10.2	8.2	9	0.70	0.50	0.83	36.55	40.41	161.0	41.32	558.63	4044.57	3176.60	2395.47	41.32	405.64	4044.57	3176.60	2262.44
10.3	8.3	9	0.70	0.50	0.83	36.55	40.39	163.0	41.72	571.73	4081.26	3205.41	2454.80	41.72	418.75	4081.26	3205.41	2321.76
10.4	8.4	9	0.70	0.50	0.83	36.55	40.38	164.9	42.11	584.96	4117.89	3234.19	2514.43	42.11	431.97	4117.89	3234.19	2381.40
10.5	8.5	10	0.70	0.50	0.76	34.25	31.70	166.9	39.14	597.26	3263.63	2563.25	2573.47	39.14	444.27	3263.63	2563.25	2440.44
10.6	8.6	10	0.70	0.50	0.76	34.25	31.69	168.9	39.50	609.67	3292.27	2585.74	2679.92	39.50	456.68	3292.27	2585.74	2546.89
10.7	8.7	10	0.70	0.50	0.76	34.25	31.67	170.8	39.86	622.19	3320.86	2608.20	2787.10	39.86	469.20	3320.86	2608.20	2654.07
10.8	8.8	10	0.70	0.50	0.76	34.25	31.66	172.8	40.23	634.83	3349.42	2630.63	2895.01	40.23	481.84	3349.42	2630.63	2761.98
10.9	8.9	10	0.70	0.50	0.76	34.25	31.64	174.8	40.59	647.58	3377.93	2653.02	3003.63	40.59	494.59	3377.93	2653.02	2870.60
11.0	9.0	10	0.70	0.50	0.76	34.25	31.63	176.7	40.95	660.45	3406.41	2675.39	3112.98	40.95	507.46	3406.41	2675.39	2979.95
11.1	9.1	10	0.70	0.50	0.76	34.25	31.61	178.7	41.32	673.43	3434.84	2697.72	3223.05	41.32	520.44	3434.84	2697.72	3090.02
11.2	9.2	10	0.70	0.50	0.76	34.25	31.59	180.6	41.68	686.52	3463.24	2720.02	3333.83	41.68	533.53	3463.24	2720.02	3200.80
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	47.55	701.46	4987.87	3917.46	3446.84	47.55	548.47	4987.87	3917.46	3313.81
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	47.96	716.53	5028.49	3949.36	3481.45	47.96	563.54	5028.49	3949.36	3348.42
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	48.37	731.73	5069.05	3981.22	3516.13	48.37	578.74	5069.05	3981.22	3383.10
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	48.79	747.05	5109.56	4013.04	3550.89	48.79	594.07	5109.56	4013.04	3417.86
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	49.20	762.51	5150.01	4044.80	3585.73	49.20	609.52	5150.01	4044.80	3452.70
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	49.61	778.09	5190.40	4076.53	3620.65	49.61	625.10	5190.40	4076.53	3487.62
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.02	793.80	5230.73	4108.21	3655.65	50.02	640.82	5230.73	4108.21	3522.62
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	50.43	809.65	5271.01	4139.84	3690.72	50.43	656.66	5271.01	4139.84	3557.69
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	50.84	825.62	5311.23	4171.43	3725.87	50.84	672.63	5311.23	4171.43	3592.84
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	51.25	841.72	5351.39	4202.98	3761.10	51.25	688.73	5351.39	4202.98	3628.07
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	51.66	857.94	5391.50	4234.47	3796.40	51.66	704.96	5391.50	4234.47	3663.37
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.07	874.30	5431.54	4265.92	3831.78	52.07	721.32	5431.54	4265.92	3698.75
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	52.48	890.79	5471.53	4297.33	3867.24	52.48	737.80	5471.53	4297.33	3734.20
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	52.89	907.40	5511.45	4328.68	3902.77	52.89	754.42	5511.45	4328.68	3769.74
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	53.30	924.15	5551.31	4359.99	3938.38	53.30	771.16	5551.31	4359.99	3805.34
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	53.71	941.02	5591.12	4391.25	3974.06	53.71	788.04	5591.12	4391.25	3841.03
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	54.12	958.02	5630.86	4422.47	4009.82	54.12	805.04	5630.86	4422.47	3876.79
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	54.53	975.15	5670.54	4453.63	4045.65	54.53	822.17	5670.54	4453.63	3912.62
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	54.94	992.41	5710.15	4484.74	4081.56	54.94	839.43	5710.15	4484.74	3948.53
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	55.35	1009.80	5749.71	4515.81	4117.54	55.35	856.82	5749.71	4515.81	3984.51
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	55.76	1027.32	5789.20	4546.83	4153.60	55.76	874.33	5789.20	4546.83	4020.57
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	56.17	1044.97	5828.63	4577.80	4189.73	56.17	891.98	5828.63	4577.80	4056.70
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	56.58	1062.74	5868.00	4608.71	4225.93	56.58	909.76	5868.00	4608.71	4092.90
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	56.99	1080.65	5907.30	4639.58	4262.21	56.99	927.66	5907.30	4639.58	4129.18

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	57.40	1098.68	5946.53	4670.40	4298.56	57.40	945.69	5946.53	4670.40	4165.53
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	57.81	1116.84	5985.70	4701.16	4334.99	57.81	963.85	5985.70	4701.16	4201.95
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	58.22	1135.13	6024.81	4731.87	4371.48	58.22	982.15	6024.81	4731.87	4238.45
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	58.63	1153.55	6063.85	4762.54	4408.05	58.63	1000.57	6063.85	4762.54	4275.02
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.04	1172.10	6102.82	4793.15	4444.69	59.04	1019.11	6102.82	4793.15	4311.66
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	59.45	1190.78	6141.73	4823.70	4481.41	59.45	1037.79	6141.73	4823.70	4348.38
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	59.86	1209.58	6180.57	4854.21	4518.19	59.86	1056.60	6180.57	4854.21	4385.16
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	60.27	1228.52	6219.34	4884.66	4555.05	60.27	1075.53	6219.34	4884.66	4422.02
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	60.68	1247.58	6258.04	4915.06	4591.98	60.68	1094.60	6258.04	4915.06	4458.95
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.09	1266.78	6296.68	4945.40	4628.98	61.09	1113.79	6296.68	4945.40	4495.95
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	61.50	1286.10	6335.25	4975.69	4666.05	61.50	1133.11	6335.25	4975.69	4533.01
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	61.91	1305.55	6373.74	5005.93	4703.19	61.91	1152.56	6373.74	5005.93	4570.16
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.32	1325.13	6412.17	5036.11	4740.40	62.32	1172.14	6412.17	5036.11	4607.37
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	62.73	1344.84	6450.53	5066.23	4777.68	62.73	1191.85	6450.53	5066.23	4644.65
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.15	1364.68	6488.81	5096.30	4815.03	63.15	1211.69	6488.81	5096.30	4682.00
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	63.56	1384.64	6527.03	5126.32	4852.45	63.56	1231.66	6527.03	5126.32	4719.42
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	63.97	1404.74	6565.17	5156.27	4889.94	63.97	1251.75	6565.17	5156.27	4756.90
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.38	1424.96	6603.24	5186.18	4927.49	64.38	1271.98	6603.24	5186.18	4794.46
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	64.79	1445.32	6641.24	5216.02	4965.12	64.79	1292.33	6641.24	5216.02	4832.09
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.20	1465.80	6679.17	5245.81	5002.81	65.20	1312.81	6679.17	5245.81	4869.78
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	65.61	1486.41	6717.02	5275.54	5040.58	65.61	1333.42	6717.02	5275.54	4907.54
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.02	1507.15	6754.80	5305.21	5078.41	66.02	1354.16	6754.80	5305.21	4945.38
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.43	1528.02	6792.51	5334.82	5116.31	66.43	1375.03	6792.51	5334.82	4983.27
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	66.84	1549.02	6830.14	5364.38	5154.27	66.84	1396.03	6830.14	5364.38	5021.24
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.25	1570.14	6867.69	5393.87	5192.30	67.25	1417.16	6867.69	5393.87	5059.27
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	67.66	1591.40	6905.17	5423.31	5230.40	67.66	1438.41	6905.17	5423.31	5097.37
16.3	14.3	11	0.70	0.50	0.86	37.70	43.86	280.8	68.07	1612.78	6942.58	5452.69	5268.57	68.07	1459.80	6942.58	5452.69	5135.54
16.4	14.4	11	0.70	0.50	0.86	37.70	43.84	282.7	68.48	1634.30	6979.90	5482.00	5306.80	68.48	1481.31	6979.90	5482.00	5173.77
16.5	14.5	11	0.70	0.50	0.86	37.70	43.81	284.7	68.89	1655.94	7017.15	5511.26	5345.10	68.89	1502.95	7017.15	5511.26	5212.07
16.6	14.6	11	0.70	0.50	0.86	37.70	43.78	286.7	69.30	1677.71	7054.33	5540.46	5383.46	69.30	1524.72	7054.33	5540.46	5250.43
16.7	14.7	11	0.70	0.50	0.86	37.70	43.75	288.6	69.71	1699.61	7091.42	5569.59	5421.89	69.71	1546.62	7091.42	5569.59	5288.86
16.8	14.8	11	0.70	0.50	0.86	37.70	43.72	290.6	70.12	1721.64	7128.44	5598.66	5460.39	70.12	1568.65	7128.44	5598.66	5327.35
16.9	14.9	11	0.70	0.50	0.86	37.70	43.69	292.6	70.53	1743.79	7165.38	5627.67	5498.94	70.53	1590.81	7165.38	5627.67	5365.91
17.0	15.0	11	0.70	0.50	0.86	37.70	43.66	294.5	70.94	1766.08	7202.24	5656.62	5537.57	70.94	1613.10	7202.24	5656.62	5404.54

1.1.3.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	3742	3636

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	1.3	30.10	7.56	813.62	408.97	453.29	5.82	1.46	102.82	51.68	328.10
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	2.5	30.10	15.13	815.45	409.89	487.53	5.99	2.97	105.86	53.21	381.12
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	3.8	30.10	22.69	817.28	410.81	523.08	6.17	4.52	108.90	54.74	435.47
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	5.0	30.10	30.26	819.11	411.73	559.96	6.34	6.11	111.94	56.27	491.13
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	6.3	30.10	37.82	820.95	412.65	598.16	6.51	7.75	114.98	57.79	548.11
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	7.5	13.98	41.34	1422.45	715.00	634.16	13.98	11.26	1422.45	715.00	608.01
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	8.8	14.39	44.96	1463.34	735.55	629.30	14.39	14.88	1463.34	735.55	603.14
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	10.1	14.79	48.67	1504.23	756.11	624.04	14.79	18.60	1504.23	756.11	597.88
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	11.3	15.19	52.49	1545.12	776.66	641.32	15.19	22.42	1545.12	776.66	615.17
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	12.6	15.59	56.41	1586.01	797.22	658.70	15.59	26.33	1586.01	797.22	632.55
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	13.8	16.00	60.43	1626.90	817.77	622.07	16.00	30.35	1626.90	817.77	586.83
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	15.1	16.40	64.55	1667.79	838.32	584.21	16.40	34.48	1667.79	838.32	539.91
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	16.3	16.80	68.77	1708.68	858.88	545.12	16.80	38.70	1708.68	858.88	491.80
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	17.6	17.20	73.10	1749.57	879.43	504.79	17.20	43.02	1749.57	879.43	442.50
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	18.8	17.60	77.52	1790.47	899.99	463.23	17.60	47.44	1790.47	899.99	392.00
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	20.1	18.01	82.04	1831.36	920.54	420.43	18.01	51.97	1831.36	920.54	340.31
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	21.4	15.93	86.05	1222.88	614.69	375.86	15.93	55.97	1222.88	614.69	286.89
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	22.6	16.27	90.14	1249.59	628.11	352.02	16.27	60.06	1249.59	628.11	254.24
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	23.9	19.21	94.97	1954.03	982.20	327.98	19.21	64.89	1954.03	982.20	221.43
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	25.1	19.61	99.90	1994.92	1002.76	280.24	19.61	69.82	1994.92	1002.76	164.96
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	26.4	23.20	105.73	437.81	220.06	269.61	9.57	72.23	169.07	84.98	151.36
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	27.6	23.20	111.56	439.64	220.99	312.59	9.75	74.68	172.10	86.51	200.49

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	28.9	23.20	117.39	441.47	221.91	356.42	9.92	77.17	175.14	88.04	250.47
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	30.2	23.20	123.22	443.30	222.83	401.08	10.09	79.70	178.18	89.56	301.29
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	31.4	23.20	129.05	445.14	223.75	446.59	10.26	82.28	181.22	91.09	352.94
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	32.7	23.20	134.88	446.97	224.67	449.28	10.43	84.91	184.26	92.62	355.16
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	33.9	23.20	140.71	448.80	225.59	451.96	10.61	87.57	187.30	94.15	357.41
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	35.2	23.20	146.54	450.64	226.51	454.65	10.78	90.28	190.34	95.68	359.70
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	36.4	23.20	152.37	452.47	227.44	457.33	10.95	93.03	193.38	97.20	362.03
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	37.7	23.20	158.20	454.30	228.36	460.02	11.12	95.83	196.42	98.73	364.40
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	39.0	20.42	163.34	1568.24	788.28	462.10	20.42	100.96	1568.24	788.28	368.80
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	40.2	20.77	168.56	1594.95	801.71	426.61	20.77	106.18	1594.95	801.71	326.95
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	41.5	21.12	173.86	1621.66	815.13	390.35	21.12	111.49	1621.66	815.13	284.36
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	42.7	21.47	179.26	1648.37	828.56	353.33	21.47	116.89	1648.37	828.56	241.06
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	44.0	21.82	184.74	1675.07	841.98	315.55	21.82	122.37	1675.07	841.98	197.03
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	45.2	21.35	190.11	411.81	207.00	276.82	12.26	125.45	216.47	108.81	150.11
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	46.5	21.35	195.48	413.64	207.92	280.91	12.43	128.57	219.51	110.34	152.70
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	47.8	21.35	200.84	415.48	208.84	285.00	12.60	131.74	222.55	111.87	155.33
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	49.0	21.35	206.21	417.31	209.76	289.09	12.78	134.95	225.59	113.39	158.00
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	50.3	21.35	211.57	419.14	210.68	293.19	12.95	138.21	228.63	114.92	160.70
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	51.5	21.35	216.94	420.98	211.61	297.28	13.12	141.50	231.67	116.45	163.44
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	52.8	21.35	222.31	422.81	212.53	301.37	13.29	144.84	234.71	117.98	166.22
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	54.0	21.35	227.67	424.64	213.45	305.46	13.46	148.23	237.75	119.51	169.04
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	55.3	21.35	233.04	426.47	214.37	309.56	13.64	151.66	240.79	121.03	171.89
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	56.5	21.35	238.41	428.31	215.29	313.65	13.81	155.13	243.83	122.56	174.79
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	57.8	21.35	243.77	430.14	216.21	317.74	13.98	158.64	246.87	124.09	177.72
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	59.1	21.35	249.14	431.97	217.13	321.83	14.15	162.20	249.91	125.62	180.69
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	60.3	21.35	254.51	433.81	218.05	325.92	14.32	165.80	252.95	127.14	183.69
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	61.6	21.35	259.87	435.64	218.98	330.02	14.50	169.44	255.98	128.67	186.73
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	62.8	21.35	265.24	437.47	219.90	334.11	14.67	173.13	259.02	130.20	189.81
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	64.1	21.35	270.60	439.31	220.82	338.20	14.84	176.86	262.06	131.73	192.93
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	65.3	21.35	275.97	441.14	221.74	342.29	15.01	180.63	265.10	133.26	196.09
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	66.6	21.35	281.34	442.97	222.66	346.39	15.18	184.45	268.14	134.78	199.28
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	67.9	21.35	286.70	444.80	223.58	350.48	15.36	188.31	271.18	136.31	202.51
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	69.1	21.35	292.07	446.64	224.50	354.57	15.53	192.21	274.22	137.84	205.77
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	70.4	21.35	297.44	448.47	225.43	358.66	15.70	196.15	277.26	139.37	209.06
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	71.6	21.35	302.80	450.30	226.35	362.75	15.87	200.14	280.30	140.89	212.38
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	72.9	21.35	308.17	452.14	227.27	366.85	16.05	204.18	283.34	142.42	215.73
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	74.1	21.35	313.53	453.97	228.19	370.94	16.22	208.25	286.38	143.95	219.10
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	75.4	21.35	318.90	455.80	229.11	375.03	16.39	212.37	289.42	145.48	222.50
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	76.7	21.35	324.27	457.64	230.03	379.12	16.56	216.53	292.46	147.00	225.93
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	77.9	21.35	329.63	459.47	230.95	383.22	16.73	220.74	295.50	148.53	229.38
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	79.2	21.35	335.00	461.30	231.88	387.31	16.91	224.99	298.53	150.06	232.87
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	80.4	21.35	340.37	463.13	232.80	391.40	17.08	229.28	301.57	151.59	236.38
8.5	6.5	8	0.63	0.50	0.40	19.00	3.56	81.7	21.35	345.73	464.97	233.72	395.49	17.25	233.62	304.35	152.98	239.91
8.6	6.6	8	0.63	0.50	0.40	19.00	3.56	82.9	21.35	351.10	466.80	234.64	399.59	17.42	238.00	307.13	154.38	243.48
8.7	6.7	8	0.63	0.50	0.40	19.00	3.56	84.2	21.35	356.47	468.63	235.56	403.68	17.59	242.42	309.90	155.77	247.09
8.8	6.8	8	0.63	0.50	0.40	19.00	3.56	85.5	21.35	361.83	470.47	236.48	407.77	17.77	246.88	312.66	157.16	250.73
8.9	6.9	8	0.63	0.50	0.40	19.00	3.55	86.7	21.35	367.20	472.30	237.40	411.86	17.94	251.39	315.41	158.54	254.41

9.0	7.0	8	0.63	0.50	0.40	19.00	3.55	88.0	21.35	372.56	474.13	238.32	415.95	18.11	255.94	318.16	159.92	258.12
9.1	7.1	8	0.63	0.50	0.40	19.00	3.55	89.2	21.35	377.93	475.97	239.25	537.65	18.28	260.54	320.90	161.30	384.43
9.2	7.2	8	0.63	0.50	0.40	19.00	3.54	90.5	21.35	383.30	477.80	240.17	660.49	18.46	265.18	323.64	162.68	511.89
9.3	7.3	8	0.63	0.50	0.40	19.00	3.54	91.7	21.35	388.66	479.63	241.09	784.48	18.63	269.86	326.36	164.05	640.49
9.4	7.4	8	0.63	0.50	0.40	19.00	3.54	93.0	21.35	394.03	481.46	242.01	909.60	18.80	274.58	329.09	165.42	770.24
9.5	7.5	8	0.63	0.50	0.40	19.00	3.53	94.2	21.35	399.40	483.30	242.93	1005.97	18.97	279.35	331.80	166.78	871.25
9.6	7.6	8	0.63	0.50	0.40	19.00	3.53	95.5	21.35	404.76	485.13	243.85	1103.21	19.14	284.16	334.51	168.14	973.14
9.7	7.7	8	0.63	0.50	0.40	19.00	3.53	96.8	21.35	410.13	486.96	244.77	1201.32	19.32	289.02	337.21	169.50	1075.90
9.8	7.8	8	0.63	0.50	0.40	19.00	3.52	98.0	21.35	415.50	488.80	245.70	1300.30	19.49	293.91	339.90	170.85	1179.55
9.9	7.9	8	0.63	0.50	0.40	19.00	3.52	99.3	21.35	420.86	490.63	246.62	1400.16	19.66	298.85	342.59	172.21	1284.07
10.0	8.0	8	0.63	0.50	0.40	19.00	3.52	100.5	21.35	426.23	492.46	247.54	1500.87	19.83	303.84	345.27	173.55	1389.47
10.1	8.1	9	0.70	0.50	0.83	36.55	40.04	101.8	40.93	436.51	3968.75	1994.91	1606.74	40.93	314.13	3968.75	1994.91	1500.31
10.2	8.2	9	0.70	0.50	0.83	36.55	40.01	103.0	41.32	446.90	4004.35	2012.81	1595.94	41.32	324.51	4004.35	2012.81	1489.51
10.3	8.3	9	0.70	0.50	0.83	36.55	39.99	104.3	41.72	457.39	4039.89	2030.67	1635.08	41.72	335.00	4039.89	2030.67	1528.66
10.4	8.4	9	0.70	0.50	0.83	36.55	39.96	105.6	42.11	467.97	4075.36	2048.50	1674.43	42.11	345.58	4075.36	2048.50	1568.00
10.5	8.5	10	0.70	0.50	0.76	34.25	31.35	106.8	39.14	477.81	3227.74	1622.44	1713.24	39.14	355.42	3227.74	1622.44	1606.82
10.6	8.6	10	0.70	0.50	0.76	34.25	31.33	108.1	39.50	487.73	3255.39	1636.34	1782.15	39.50	365.34	3255.39	1636.34	1675.72
10.7	8.7	10	0.70	0.50	0.76	34.25	31.31	109.3	39.86	497.75	3282.98	1650.21	1851.51	39.86	375.36	3282.98	1650.21	1745.09
10.8	8.8	10	0.70	0.50	0.76	34.25	31.29	110.6	40.23	507.86	3310.52	1664.05	1921.33	40.23	385.47	3310.52	1664.05	1814.90
10.9	8.9	10	0.70	0.50	0.76	34.25	31.27	111.8	40.59	518.06	3338.00	1677.86	1991.60	40.59	395.68	3338.00	1677.86	1885.18
11.0	9.0	10	0.70	0.50	0.76	34.25	31.24	113.1	40.95	528.36	3365.43	1691.65	2062.33	40.95	405.97	3365.43	1691.65	1955.91
11.1	9.1	10	0.70	0.50	0.76	34.25	31.22	114.4	41.32	538.74	3392.79	1705.40	2133.51	41.32	416.35	3392.79	1705.40	2027.09
11.2	9.2	10	0.70	0.50	0.76	34.25	31.20	115.6	41.68	549.22	3420.10	1719.13	2205.15	41.68	426.83	3420.10	1719.13	2098.73
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	47.55	561.17	4928.49	2477.33	2278.44	47.55	438.78	4928.49	2477.33	2172.02
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	47.96	573.22	4967.56	2496.97	2302.06	47.96	450.83	4967.56	2496.97	2195.64
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	48.37	585.38	5006.56	2516.57	2325.74	48.37	462.99	5006.56	2516.57	2219.31
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	48.79	597.64	5045.47	2536.13	2349.47	48.79	475.25	5045.47	2536.13	2243.04
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	49.20	610.01	5084.30	2555.65	2373.26	49.20	487.62	5084.30	2555.65	2266.83
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	49.61	622.47	5123.04	2575.12	2397.11	49.61	500.08	5123.04	2575.12	2290.68
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.02	635.04	5161.70	2594.55	2421.01	50.02	512.65	5161.70	2594.55	2314.59
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	50.43	647.72	5200.27	2613.94	2444.97	50.43	525.33	5200.27	2613.94	2338.55
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	50.84	660.49	5238.75	2633.28	2468.99	50.84	538.10	5238.75	2633.28	2362.56
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	51.25	673.37	5277.15	2652.59	2493.06	51.25	550.98	5277.15	2652.59	2386.64
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	51.66	686.36	5315.46	2671.84	2517.19	51.66	563.97	5315.46	2671.84	2410.76
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.07	699.44	5353.68	2691.05	2541.37	52.07	577.05	5353.68	2691.05	2434.95
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	52.48	712.63	5391.81	2710.22	2565.61	52.48	590.24	5391.81	2710.22	2459.19
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	52.89	725.92	5429.86	2729.34	2589.91	52.89	603.53	5429.86	2729.34	2483.48
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	53.30	739.32	5467.81	2748.42	2614.25	53.30	616.93	5467.81	2748.42	2507.83
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	53.71	752.82	5505.67	2767.45	2638.66	53.71	630.43	5505.67	2767.45	2532.23
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	54.12	766.42	5543.44	2786.44	2663.11	54.12	644.03	5543.44	2786.44	2556.69
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	54.53	780.12	5581.11	2805.37	2687.62	54.53	657.73	5581.11	2805.37	2581.20
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	54.94	793.93	5618.70	2824.26	2712.19	54.94	671.54	5618.70	2824.26	2605.76
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	55.35	807.84	5656.18	2843.11	2736.81	55.35	685.45	5656.18	2843.11	2630.38
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	55.76	821.86	5693.58	2861.90	2761.48	55.76	699.47	5693.58	2861.90	2655.05
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	56.17	835.97	5730.87	2880.65	2786.20	56.17	713.58	5730.87	2880.65	2679.77
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	56.58	850.19	5768.08	2899.35	2810.98	56.58	727.80	5768.08	2899.35	2704.55
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	56.99	864.52	5805.18	2918.00	2835.80	56.99	742.13	5805.18	2918.00	2729.38

13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	57.40	878.94	5842.19	2936.60	2860.68	57.40	756.55	5842.19	2936.60	2754.26
13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	57.81	893.47	5879.09	2955.16	2885.61	57.81	771.08	5879.09	2955.16	2779.19
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	58.22	908.11	5915.90	2973.66	2910.68	58.22	785.72	5915.90	2973.66	2804.25
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	58.63	922.84	5952.61	2992.11	2935.87	58.63	800.45	5952.61	2992.11	2829.45
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.04	937.68	5989.22	3010.51	2961.20	59.04	815.29	5989.22	3010.51	2854.78
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	59.45	952.62	6025.73	3028.86	2986.67	59.45	830.23	6025.73	3028.86	2880.24
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	59.86	967.67	6062.13	3047.16	3012.27	59.86	845.28	6062.13	3047.16	2905.85
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	60.27	982.82	6098.44	3065.41	3038.02	60.27	860.43	6098.44	3065.41	2931.59
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	60.68	998.07	6134.63	3083.60	3063.91	60.68	875.68	6134.63	3083.60	2957.48
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.09	1013.42	6170.73	3101.75	3089.94	61.09	891.03	6170.73	3101.75	2983.51
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	61.50	1028.88	6206.72	3119.84	3116.12	61.50	906.49	6206.72	3119.84	3009.69
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	61.91	1044.44	6242.60	3137.87	3142.45	61.91	922.05	6242.60	3137.87	3036.02
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.32	1060.10	6280.72	3157.04	3168.93	62.32	937.72	6280.72	3157.04	3062.51
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	62.73	1075.87	6318.80	3176.18	3195.49	62.73	953.48	6318.80	3176.18	3089.06
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.15	1091.74	6356.84	3195.30	3222.12	63.15	969.35	6356.84	3195.30	3115.69
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	63.56	1107.71	6394.84	3214.40	3248.82	63.56	985.33	6394.84	3214.40	3142.40
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	63.97	1123.79	6432.79	3233.48	3275.60	63.97	1001.40	6432.79	3233.48	3169.18
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.38	1139.97	6470.71	3252.53	3302.46	64.38	1017.58	6470.71	3252.53	3196.03
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	64.79	1156.25	6508.58	3271.57	3329.38	64.79	1033.86	6508.58	3271.57	3222.96
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.20	1172.64	6546.42	3290.59	3356.39	65.20	1050.25	6546.42	3290.59	3249.96
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	65.61	1189.13	6584.21	3309.59	3383.46	65.61	1066.74	6584.21	3309.59	3277.04
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.02	1205.72	6621.96	3328.56	3410.62	66.02	1083.33	6621.96	3328.56	3304.19
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.43	1222.41	6659.67	3347.52	3437.84	66.43	1100.03	6659.67	3347.52	3331.42
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	66.84	1239.21	6697.35	3366.45	3465.14	66.84	1116.82	6697.35	3366.45	3358.72
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.25	1256.11	6734.98	3385.37	3492.52	67.25	1133.72	6734.98	3385.37	3386.09
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	67.66	1273.12	6772.56	3404.26	3519.97	67.66	1150.73	6772.56	3404.26	3413.54
16.3	14.3	11	0.70	0.50	0.86	37.70	43.03	179.7	68.07	1290.23	6810.11	3423.14	3547.49	68.07	1167.84	6810.11	3423.14	3441.07
16.4	14.4	11	0.70	0.50	0.86	37.70	43.01	181.0	68.48	1307.44	6847.62	3441.99	3575.09	68.48	1185.05	6847.62	3441.99	3468.67
16.5	14.5	11	0.70	0.50	0.86	37.70	42.98	182.2	68.89	1324.75	6885.09	3460.82	3602.77	68.89	1202.36	6885.09	3460.82	3496.34
16.6	14.6	11	0.70	0.50	0.86	37.70	42.96	183.5	69.30	1342.17	6922.51	3479.64	3630.52	69.30	1219.78	6922.51	3479.64	3524.09
16.7	14.7	11	0.70	0.50	0.86	37.70	42.94	184.7	69.71	1359.69	6959.90	3498.43	3658.34	69.71	1237.30	6959.90	3498.43	3551.91
16.8	14.8	11	0.70	0.50	0.86	37.70	42.92	186.0	70.12	1377.31	6997.25	3517.20	3686.24	70.12	1254.92	6997.25	3517.20	3579.81
16.9	14.9	11	0.70	0.50	0.86	37.70	42.89	187.2	70.53	1395.04	7034.55	3535.95	3714.21	70.53	1272.65	7034.55	3535.95	3607.78
17.0	15.0	11	0.70	0.50	0.86	37.70	42.87	188.5	70.94	1412.87	7071.82	3554.68	3742.26	70.94	1290.48	7071.82	3554.68	3635.83

1.1.3.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.1**	**19.35**	**40**		0.70	0.50	0.84
2	**1.1**	**2.5**	**18.33**	**22**	**86**	0.35	0.50	0.40
3	**2.5**	**3.6**	**19.35**	**40**		0.70	0.50	0.84
4	**3.6**	**3.8**	**19.35**			0.70	0.50	0.00
5	**3.8**	**4.0**	**19.35**	**40**		0.70	0.50	0.84
6	**4.0**	**5.0**	**18.33**	**22**	**40**	0.58	0.50	0.40
7	**5.0**	**5.5**	**19.35**			0.70	0.50	0.00
8	**5.5**	**10.0**	**18.33**	**22**	**34**	0.63	0.50	0.40
9	**10.0**	**10.4**	**19.35**	**40**		0.70	0.50	0.83
10	**10.4**	**11.2**	**19.35**			0.70	0.50	0.00
11	**11.2**	**30.0**	**19.35**	**41**		0.70	0.50	0.86

1.1.3.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7558	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.8	30.10	11.35	813.62	920.18	1014.97
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	5.7	30.10	22.69	815.45	922.25	1087.07
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	8.5	30.10	34.04	817.28	924.32	1162.14
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	11.3	30.10	45.39	819.11	926.40	1240.18
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	14.1	30.10	56.74	820.95	928.47	1321.20
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	17.0	13.98	62.01	1422.45	1608.75	1399.91
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	19.8	14.39	67.43	1463.34	1654.99	1293.46
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	22.6	14.79	73.01	1504.23	1701.24	1184.03
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	25.4	15.19	78.74	1545.12	1747.49	1220.44
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	28.3	15.59	84.61	1586.01	1793.73	1256.99
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	31.1	16.00	90.64	1626.90	1839.98	1171.95
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	33.9	16.40	96.83	1667.79	1886.23	1084.08
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	36.8	16.80	103.16	1708.68	1932.47	993.36
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	39.6	17.20	109.64	1749.57	1978.72	899.80
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	42.4	17.60	116.28	1790.47	2024.97	803.40
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	45.2	18.01	123.07	1831.36	2071.22	704.16
3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	48.1	0.00	123.07	0.00	0.00	596.03
3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	50.9	0.00	123.07	0.00	0.00	627.53
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	53.7	19.21	130.31	1954.03	2209.96	665.46
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	56.5	19.61	137.70	1994.92	2256.20	554.84
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	59.4	23.20	146.45	437.81	495.15	407.69
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	62.2	23.20	155.20	439.64	497.22	379.12

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	65.0	23.20	163.94	441.47	499.29	350.42
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	67.9	23.20	172.69	443.30	501.37	321.57
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	70.7	23.20	181.43	445.14	503.44	292.59
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	73.5	23.20	190.18	446.97	505.51	294.83
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	76.3	23.20	198.93	448.80	507.58	297.07
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	79.2	23.20	207.67	450.64	509.66	299.31
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	82.0	23.20	216.42	452.47	511.73	301.55
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	84.8	23.20	225.17	454.30	513.80	303.79
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	87.7	0.00	225.17	0.00	0.00	298.42
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	90.5	0.00	225.17	0.00	0.00	327.79
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	93.3	0.00	225.17	0.00	0.00	357.31
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	96.1	0.00	225.17	0.00	0.00	386.96
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	99.0	0.00	225.17	0.00	0.00	416.75
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	101.8	21.35	233.22	411.81	465.75	453.68
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	104.6	21.35	241.26	413.64	467.82	459.39
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	107.4	21.35	249.31	415.48	469.89	465.10
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	110.3	21.35	257.36	417.31	471.97	470.81
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	113.1	21.35	265.41	419.14	474.04	476.51
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	115.9	21.35	273.46	420.98	476.11	482.22
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	118.8	21.35	281.51	422.81	478.18	487.93
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	121.6	21.35	289.56	424.64	480.26	493.64
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	124.4	21.35	297.61	426.47	482.33	499.35
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	127.2	21.35	305.66	428.31	484.40	505.05
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	130.1	21.35	313.71	430.14	486.48	510.76
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	132.9	21.35	321.76	431.97	488.55	516.47
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	135.7	21.35	329.81	433.81	490.62	522.18
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	138.5	21.35	337.86	435.64	492.70	527.88
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	345.91	437.47	494.77	533.59
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	144.2	21.35	353.96	439.31	496.84	539.30
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	147.0	21.35	362.01	441.14	498.92	545.01
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	149.9	21.35	370.06	442.97	500.99	550.72
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	152.7	21.35	378.11	444.80	503.06	556.42
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	155.5	21.35	386.16	446.64	505.13	562.13
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	158.3	21.35	394.21	448.47	507.21	567.84
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	161.2	21.35	402.26	450.30	509.28	573.55
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	164.0	21.35	410.30	452.14	511.35	579.25
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	166.8	21.35	418.35	453.97	513.43	584.96
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	169.6	21.35	426.40	455.80	515.50	590.67
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	172.5	21.35	434.45	457.64	517.57	596.38
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	175.3	21.35	442.50	459.47	519.65	602.09
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	178.1	21.35	450.55	461.30	521.72	607.79
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	181.0	21.35	458.60	463.13	523.79	613.50
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	183.8	21.35	466.65	464.97	525.87	619.21
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	186.6	21.35	474.70	466.80	527.94	624.92
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	189.4	21.35	482.75	468.63	530.01	630.62
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	192.3	21.35	490.80	470.47	532.08	636.33
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	195.1	21.35	498.85	472.30	534.16	642.04

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	197.9	21.35	506.90	474.13	536.23	647.75
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	200.7	21.35	514.95	475.97	538.30	921.18
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	203.6	21.35	523.00	477.80	540.38	1197.42
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	206.4	21.35	531.05	479.63	542.45	1476.46
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	209.2	21.35	539.10	481.46	544.52	1758.29
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	212.1	21.35	547.15	483.30	546.60	1725.80
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	214.9	21.35	555.20	485.13	548.67	1693.16
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	217.7	21.35	563.25	486.96	550.74	1660.38
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	220.5	21.35	571.29	488.80	552.82	1627.47
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	223.4	21.35	579.34	490.63	554.89	1594.41
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	226.2	21.35	587.39	492.46	556.96	1561.22
10.1	8.1	9	0.70	0.50	0.83	36.55	40.45	229.0	40.93	602.82	4009.66	4534.81	1534.30
10.2	8.2	9	0.70	0.50	0.83	36.55	40.45	231.8	41.32	618.40	4048.24	4578.46	1239.65
10.3	8.3	9	0.70	0.50	0.83	36.55	40.45	234.7	41.72	634.13	4086.83	4622.10	1324.33
10.4	8.4	9	0.70	0.50	0.83	36.55	40.45	237.5	42.11	650.00	4125.42	4665.74	1409.51
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	240.3	0.00	650.00	0.00	0.00	1481.23
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	243.2	0.00	650.00	0.00	0.00	1870.45
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	246.0	0.00	650.00	0.00	0.00	2262.81
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	248.8	0.00	650.00	0.00	0.00	2658.33
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	251.6	0.00	650.00	0.00	0.00	3056.98
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	254.5	0.00	650.00	0.00	0.00	3458.79
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	257.3	0.00	650.00	0.00	0.00	3863.73
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	260.1	0.00	650.00	0.00	0.00	4271.80
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	47.55	667.93	5017.74	5674.93	4698.60
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	47.96	686.01	5061.03	5723.89	4746.51
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	48.37	704.25	5104.32	5772.85	4794.39
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	48.79	722.64	5147.61	5821.81	4842.22
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	49.20	741.19	5189.00	5868.62	4890.01
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	49.61	759.89	5230.34	5915.37	4937.90
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.02	778.75	5271.64	5962.08	4985.89
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	50.43	797.76	5312.89	6008.74	5033.97
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	50.84	816.92	5354.11	6055.35	5082.15
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	51.25	836.24	5395.28	6101.92	5130.43
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	51.66	855.72	5436.41	6148.43	5178.81
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.07	875.34	5477.49	6194.90	5227.29
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	52.48	895.13	5518.54	6241.32	5275.86
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	52.89	915.07	5559.53	6287.68	5324.53
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	53.30	935.16	5600.49	6334.00	5373.29
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	53.71	955.41	5641.40	6380.27	5422.15
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	54.12	975.81	5682.26	6426.49	5471.11
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	54.53	996.37	5723.08	6472.65	5520.16
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	54.94	1017.08	5763.86	6518.77	5569.31
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	55.35	1037.94	5804.58	6564.83	5618.55
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	55.76	1058.97	5845.27	6610.84	5667.89
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	56.17	1080.14	5885.90	6656.80	5717.32
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	56.58	1101.47	5926.50	6702.71	5766.85
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	56.99	1122.96	5967.04	6748.56	5816.47

13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	57.40	1144.60	6007.54	6794.36	5866.19
13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	57.81	1166.39	6047.99	6840.11	5916.00
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	58.22	1188.34	6088.39	6885.81	5965.90
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	58.63	1210.44	6128.75	6931.45	6015.90
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.04	1232.70	6169.05	6977.03	6065.99
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	59.45	1255.11	6209.31	7022.57	6116.17
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	59.86	1277.68	6249.52	7068.04	6166.45
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	60.27	1300.40	6289.68	7113.47	6216.81
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	60.68	1323.28	6329.80	7158.83	6267.27
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.09	1346.31	6369.86	7204.14	6317.83
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	61.50	1369.50	6409.87	7249.40	6368.47
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	61.91	1392.84	6449.84	7294.59	6419.20
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.32	1416.34	6489.75	7339.73	6470.03
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	62.73	1439.99	6529.61	7384.82	6520.95
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.15	1463.79	6569.43	7429.85	6571.96
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	63.56	1487.75	6609.19	7474.81	6623.05
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	63.97	1511.87	6648.90	7519.72	6674.24
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.38	1536.14	6688.55	7564.58	6725.52
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	64.79	1560.56	6728.16	7609.37	6776.89
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.20	1585.14	6767.71	7654.10	6828.35
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	65.61	1609.87	6807.22	7698.78	6879.90
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.02	1634.76	6846.66	7743.39	6931.53
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.43	1659.80	6886.06	7787.95	6983.26
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	66.84	1685.00	6925.40	7832.44	7035.07
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.25	1710.35	6964.69	7876.88	7086.97
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	67.66	1735.86	7003.92	7921.25	7138.96
16.3	14.3	11	0.70	0.50	0.86	37.70	44.50	404.3	68.07	1761.52	7043.10	7965.56	7191.04
16.4	14.4	11	0.70	0.50	0.86	37.70	44.48	407.2	68.48	1787.34	7082.23	8009.81	7243.21
16.5	14.5	11	0.70	0.50	0.86	37.70	44.46	410.0	68.89	1813.31	7121.30	8054.00	7295.46
16.6	14.6	11	0.70	0.50	0.86	37.70	44.44	412.8	69.30	1839.43	7160.32	8098.13	7347.80
16.7	14.7	11	0.70	0.50	0.86	37.70	44.42	415.6	69.71	1865.71	7199.28	8142.19	7400.23
16.8	14.8	11	0.70	0.50	0.86	37.70	44.39	418.5	70.12	1892.15	7238.18	8186.19	7452.74
16.9	14.9	11	0.70	0.50	0.86	37.70	44.37	421.3	70.53	1918.73	7277.03	8230.12	7505.34
17.0	15.0	11	0.70	0.50	0.86	37.70	44.35	424.1	70.94	1945.48	7315.82	8274.00	7558.02

1.1.3.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5412	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.0	30.10	9.46	813.62	639.01	706.21
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	3.9	30.10	18.91	815.45	640.45	757.65
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	5.9	30.10	28.37	817.28	641.89	811.15
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	7.9	30.10	37.82	819.11	643.33	866.72
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	9.8	30.10	47.28	820.95	644.77	924.35
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	11.8	13.98	51.67	1422.45	1117.19	979.65
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	13.7	14.39	56.19	1463.34	1149.30	906.38
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	15.7	14.79	60.84	1504.23	1181.42	831.06
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	17.7	15.19	65.61	1545.12	1213.53	857.04
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	19.6	15.59	70.51	1586.01	1245.65	883.13
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	21.6	16.00	75.54	1626.90	1277.76	824.80
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	23.6	16.40	80.69	1667.79	1309.88	764.53
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	25.5	16.80	85.97	1708.68	1342.00	702.29
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	27.5	17.20	91.37	1749.57	1374.11	638.11
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	29.5	17.60	96.90	1790.47	1406.23	571.96
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	31.4	18.01	102.56	1831.36	1438.34	503.86
3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	33.4	0.00	102.56	0.00	0.00	428.78
3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	35.3	0.00	102.56	0.00	0.00	450.65
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	37.3	19.21	108.59	1954.03	1534.69	477.86
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	39.3	19.61	114.75	1994.92	1566.81	401.94
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	41.2	23.20	122.04	437.81	343.85	300.80
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	43.2	23.20	129.33	439.64	345.29	282.02

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	45.2	23.20	136.62	441.47	346.73	263.14
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	47.1	23.20	143.91	443.30	348.17	244.17
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	49.1	23.20	151.20	445.14	349.61	225.10
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	51.1	23.20	158.48	446.97	351.05	227.71
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	53.0	23.20	165.77	448.80	352.49	230.32
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	55.0	23.20	173.06	450.64	353.93	232.93
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	56.9	23.20	180.35	452.47	355.37	235.54
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	58.9	23.20	187.64	454.30	356.81	238.16
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	60.9	0.00	187.64	0.00	0.00	234.43
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	62.8	0.00	187.64	0.00	0.00	254.83
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	64.8	0.00	187.64	0.00	0.00	275.32
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	66.8	0.00	187.64	0.00	0.00	295.92
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	68.7	0.00	187.64	0.00	0.00	316.61
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	70.7	21.35	194.35	411.81	323.43	343.22
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	72.6	21.35	201.05	413.64	324.87	348.16
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	74.6	21.35	207.76	415.48	326.31	353.10
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	76.6	21.35	214.47	417.31	327.75	358.03
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	78.5	21.35	221.18	419.14	329.19	362.97
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	80.5	21.35	227.89	420.98	330.63	367.90
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	82.5	21.35	234.59	422.81	332.07	372.84
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	84.4	21.35	241.30	424.64	333.51	377.78
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	86.4	21.35	248.01	426.47	334.95	382.71
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	88.4	21.35	254.72	428.31	336.39	387.65
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	90.3	21.35	261.43	430.14	337.83	392.58
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	92.3	21.35	268.13	431.97	339.27	397.52
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	94.2	21.35	274.84	433.81	340.71	402.45
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	96.2	21.35	281.55	435.64	342.15	407.39
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	98.2	21.35	288.26	437.47	343.59	412.33
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	100.1	21.35	294.97	439.31	345.03	417.26
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	102.1	21.35	301.67	441.14	346.47	422.20
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	104.1	21.35	308.38	442.97	347.91	427.13
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	106.0	21.35	315.09	444.80	349.35	432.07
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	108.0	21.35	321.80	446.64	350.79	437.01
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	110.0	21.35	328.50	448.47	352.23	441.94
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	111.9	21.35	335.21	450.30	353.67	446.88
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	113.9	21.35	341.92	452.14	355.11	451.81
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	115.8	21.35	348.63	453.97	356.55	456.75
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	117.8	21.35	355.34	455.80	357.99	461.69
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	119.8	21.35	362.04	457.64	359.43	466.62
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	121.7	21.35	368.75	459.47	360.87	471.56
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	123.7	21.35	375.46	461.30	362.30	476.49
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	125.7	21.35	382.17	463.13	363.74	481.43
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	127.6	21.35	388.88	464.97	365.18	486.36
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	129.6	21.35	395.58	466.80	366.62	491.30
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	131.6	21.35	402.29	468.63	368.06	496.24
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	133.5	21.35	409.00	470.47	369.50	501.17
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	135.5	21.35	415.71	472.30	370.94	506.11

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	137.4	21.35	422.42	474.13	372.38	511.04
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	139.4	21.35	429.12	475.97	373.82	701.81
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	435.83	477.80	375.26	894.42
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	143.3	21.35	442.54	479.63	376.70	1088.87
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	145.3	21.35	449.25	481.46	378.14	1285.16
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	147.3	21.35	455.96	483.30	379.58	1263.57
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	149.2	21.35	462.66	485.13	381.02	1241.87
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	151.2	21.35	469.37	486.96	382.46	1220.09
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	153.2	21.35	476.08	488.80	383.90	1198.20
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	155.1	21.35	482.79	490.63	385.34	1176.22
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	157.1	21.35	489.50	492.46	386.78	1154.14
10.1	8.1	9	0.70	0.50	0.83	36.55	40.43	159.0	40.93	502.35	4007.84	3147.75	1137.31
10.2	8.2	9	0.70	0.50	0.83	36.55	40.41	161.0	41.32	515.34	4044.57	3176.60	934.67
10.3	8.3	9	0.70	0.50	0.83	36.55	40.39	163.0	41.72	528.44	4081.26	3205.41	993.99
10.4	8.4	9	0.70	0.50	0.83	36.55	40.38	164.9	42.11	541.67	4117.89	3234.19	1053.63
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	166.9	0.00	541.67	0.00	0.00	1101.97
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	168.9	0.00	541.67	0.00	0.00	1370.24
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	170.8	0.00	541.67	0.00	0.00	1640.66
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	172.8	0.00	541.67	0.00	0.00	1913.21
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	174.8	0.00	541.67	0.00	0.00	2187.89
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	176.7	0.00	541.67	0.00	0.00	2464.71
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	178.7	0.00	541.67	0.00	0.00	2743.65
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	180.6	0.00	541.67	0.00	0.00	3024.71
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	47.55	556.61	4987.87	3917.46	3320.89
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	47.96	571.68	5028.49	3949.36	3355.49
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	48.37	586.88	5069.05	3981.22	3390.18
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	48.79	602.20	5109.56	4013.04	3424.94
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	49.20	617.66	5150.01	4044.80	3459.78
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	49.61	633.24	5190.40	4076.53	3494.70
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.02	648.95	5230.73	4108.21	3529.69
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	50.43	664.80	5271.01	4139.84	3564.76
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	50.84	680.77	5311.23	4171.43	3599.91
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	51.25	696.87	5351.39	4202.98	3635.14
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	51.66	713.10	5391.50	4234.47	3670.44
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.07	729.45	5431.54	4265.92	3705.82
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	52.48	745.94	5471.53	4297.33	3741.28
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	52.89	762.56	5511.45	4328.68	3776.81
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	53.30	779.30	5551.31	4359.99	3812.42
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	53.71	796.17	5591.12	4391.25	3848.10
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	54.12	813.17	5630.86	4422.47	3883.86
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	54.53	830.31	5670.54	4453.63	3919.69
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	54.94	847.56	5710.15	4484.74	3955.60
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	55.35	864.95	5749.71	4515.81	3991.58
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	55.76	882.47	5789.20	4546.83	4027.64
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	56.17	900.12	5828.63	4577.80	4063.77
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	56.58	917.89	5868.00	4608.71	4099.98
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	56.99	935.80	5907.30	4639.58	4136.25

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	57.40	953.83	5946.53	4670.40	4172.61
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	57.81	971.99	5985.70	4701.16	4209.03
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	58.22	990.28	6024.81	4731.87	4245.53
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	58.63	1008.70	6063.85	4762.54	4282.10
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.04	1027.25	6102.82	4793.15	4318.74
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	59.45	1045.93	6141.73	4823.70	4355.45
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	59.86	1064.74	6180.57	4854.21	4392.24
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	60.27	1083.67	6219.34	4884.66	4429.09
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	60.68	1102.74	6258.04	4915.06	4466.02
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.09	1121.93	6296.68	4945.40	4503.02
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	61.50	1141.25	6335.25	4975.69	4540.09
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	61.91	1160.70	6373.74	5005.93	4577.23
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.32	1180.28	6412.17	5036.11	4614.44
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	62.73	1199.99	6450.53	5066.23	4651.72
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.15	1219.83	6488.81	5096.30	4689.07
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	63.56	1239.79	6527.03	5126.32	4726.49
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	63.97	1259.89	6565.17	5156.27	4763.98
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.38	1280.11	6603.24	5186.18	4801.54
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	64.79	1300.47	6641.24	5216.02	4839.16
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.20	1320.95	6679.17	5245.81	4876.86
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	65.61	1341.56	6717.02	5275.54	4914.62
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.02	1362.30	6754.80	5305.21	4952.45
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.43	1383.17	6792.51	5334.82	4990.35
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	66.84	1404.17	6830.14	5364.38	5028.31
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.25	1425.29	6867.69	5393.87	5066.35
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	67.66	1446.55	6905.17	5423.31	5104.45
16.3	14.3	11	0.70	0.50	0.86	37.70	43.86	280.8	68.07	1467.93	6942.58	5452.69	5142.61
16.4	14.4	11	0.70	0.50	0.86	37.70	43.84	282.7	68.48	1489.45	6979.90	5482.00	5180.84
16.5	14.5	11	0.70	0.50	0.86	37.70	43.81	284.7	68.89	1511.09	7017.15	5511.26	5219.14
16.6	14.6	11	0.70	0.50	0.86	37.70	43.78	286.7	69.30	1532.86	7054.33	5540.46	5257.51
16.7	14.7	11	0.70	0.50	0.86	37.70	43.75	288.6	69.71	1554.76	7091.42	5569.59	5295.94
16.8	14.8	11	0.70	0.50	0.86	37.70	43.72	290.6	70.12	1576.79	7128.44	5598.66	5334.43
16.9	14.9	11	0.70	0.50	0.86	37.70	43.69	292.6	70.53	1598.95	7165.38	5627.67	5372.99
17.0	15.0	11	0.70	0.50	0.86	37.70	43.66	294.5	70.94	1621.23	7202.24	5656.62	5411.61

1.1.3.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3641	-

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	1.3	30.10	7.56	813.62	408.97	453.29
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	2.5	30.10	15.13	815.45	409.89	487.53
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	3.8	30.10	22.69	817.28	410.81	523.08
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	5.0	30.10	30.26	819.11	411.73	559.96
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	6.3	30.10	37.82	820.95	412.65	598.16
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	7.5	13.98	41.34	1422.45	715.00	634.16
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	8.8	14.39	44.96	1463.34	735.55	587.90
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	10.1	14.79	48.67	1504.23	756.11	540.35
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	11.3	15.19	52.49	1545.12	776.66	557.63
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	12.6	15.59	56.41	1586.01	797.22	575.01
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	13.8	16.00	60.43	1626.90	817.77	538.38
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	15.1	16.40	64.55	1667.79	838.32	500.52
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	16.3	16.80	68.77	1708.68	858.88	461.43
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	17.6	17.20	73.10	1749.57	879.43	421.10
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	18.8	17.60	77.52	1790.47	899.99	379.54
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	20.1	18.01	82.04	1831.36	920.54	336.74
3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	21.4	0.00	82.04	0.00	0.00	288.69
3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	22.6	0.00	82.04	0.00	0.00	302.68
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	23.9	19.21	86.87	1954.03	982.20	320.94
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	25.1	19.61	91.80	1994.92	1002.76	273.21
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	26.4	23.20	97.63	437.81	220.06	209.49
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	27.6	23.20	103.46	439.64	220.99	198.49

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	28.9	23.20	109.30	441.47	221.91	187.42
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	30.2	23.20	115.13	443.30	222.83	176.29
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	31.4	23.20	120.96	445.14	223.75	165.10
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	32.7	23.20	126.79	446.97	224.67	167.78
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	33.9	23.20	132.62	448.80	225.59	170.47
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	35.2	23.20	138.45	450.64	226.51	173.16
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	36.4	23.20	144.28	452.47	227.44	175.84
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	37.7	23.20	150.11	454.30	228.36	178.53
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	39.0	0.00	150.11	0.00	0.00	176.14
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	40.2	0.00	150.11	0.00	0.00	189.20
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	41.5	0.00	150.11	0.00	0.00	202.31
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	42.7	0.00	150.11	0.00	0.00	215.49
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	44.0	0.00	150.11	0.00	0.00	228.73
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	45.2	21.35	155.48	411.81	207.00	246.70
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	46.5	21.35	160.84	413.64	207.92	250.80
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	47.8	21.35	166.21	415.48	208.84	254.89
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	49.0	21.35	171.58	417.31	209.76	258.98
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	50.3	21.35	176.94	419.14	210.68	263.07
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	51.5	21.35	182.31	420.98	211.61	267.16
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	52.8	21.35	187.67	422.81	212.53	271.26
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	54.0	21.35	193.04	424.64	213.45	275.35
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	55.3	21.35	198.41	426.47	214.37	279.44
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	56.5	21.35	203.77	428.31	215.29	283.53
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	57.8	21.35	209.14	430.14	216.21	287.63
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	59.1	21.35	214.51	431.97	217.13	291.72
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	60.3	21.35	219.87	433.81	218.05	295.81
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	61.6	21.35	225.24	435.64	218.98	299.90
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	62.8	21.35	230.61	437.47	219.90	303.99
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	64.1	21.35	235.97	439.31	220.82	308.09
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	65.3	21.35	241.34	441.14	221.74	312.18
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	66.6	21.35	246.70	442.97	222.66	316.27
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	67.9	21.35	252.07	444.80	223.58	320.36
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	69.1	21.35	257.44	446.64	224.50	324.46
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	70.4	21.35	262.80	448.47	225.43	328.55
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	71.6	21.35	268.17	450.30	226.35	332.64
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	72.9	21.35	273.54	452.14	227.27	336.73
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	74.1	21.35	278.90	453.97	228.19	340.82
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	75.4	21.35	284.27	455.80	229.11	344.92
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	76.7	21.35	289.64	457.64	230.03	349.01
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	77.9	21.35	295.00	459.47	230.95	353.10
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	79.2	21.35	300.37	461.30	231.88	357.19
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	80.4	21.35	305.73	463.13	232.80	361.29
8.5	6.5	8	0.63	0.50	0.40	19.00	3.56	81.7	21.35	311.10	464.97	233.72	365.38
8.6	6.6	8	0.63	0.50	0.40	19.00	3.56	82.9	21.35	316.47	466.80	234.64	369.47
8.7	6.7	8	0.63	0.50	0.40	19.00	3.56	84.2	21.35	321.83	468.63	235.56	373.56
8.8	6.8	8	0.63	0.50	0.40	19.00	3.56	85.5	21.35	327.20	470.47	236.48	377.65
8.9	6.9	8	0.63	0.50	0.40	19.00	3.55	86.7	21.35	332.57	472.30	237.40	381.75

9.0	7.0	8	0.63	0.50	0.40	19.00	3.55	88.0	21.35	337.93	474.13	238.32	385.84
9.1	7.1	8	0.63	0.50	0.40	19.00	3.55	89.2	21.35	343.30	475.97	239.25	507.54
9.2	7.2	8	0.63	0.50	0.40	19.00	3.54	90.5	21.35	348.67	477.80	240.17	630.38
9.3	7.3	8	0.63	0.50	0.40	19.00	3.54	91.7	21.35	354.03	479.63	241.09	754.36
9.4	7.4	8	0.63	0.50	0.40	19.00	3.54	93.0	21.35	359.40	481.46	242.01	879.48
9.5	7.5	8	0.63	0.50	0.40	19.00	3.53	94.2	21.35	364.76	483.30	242.93	866.60
9.6	7.6	8	0.63	0.50	0.40	19.00	3.53	95.5	21.35	370.13	485.13	243.85	853.65
9.7	7.7	8	0.63	0.50	0.40	19.00	3.53	96.8	21.35	375.50	486.96	244.77	840.63
9.8	7.8	8	0.63	0.50	0.40	19.00	3.52	98.0	21.35	380.86	488.80	245.70	827.56
9.9	7.9	8	0.63	0.50	0.40	19.00	3.52	99.3	21.35	386.23	490.63	246.62	814.43
10.0	8.0	8	0.63	0.50	0.40	19.00	3.52	100.5	21.35	391.60	492.46	247.54	801.23
10.1	8.1	9	0.70	0.50	0.83	36.55	40.04	101.8	40.93	401.88	3968.75	1994.91	792.25
10.2	8.2	9	0.70	0.50	0.83	36.55	40.01	103.0	41.32	412.27	4004.35	2012.81	665.68
10.3	8.3	9	0.70	0.50	0.83	36.55	39.99	104.3	41.72	422.75	4039.89	2030.67	704.83
10.4	8.4	9	0.70	0.50	0.83	36.55	39.96	105.6	42.11	433.34	4075.36	2048.50	744.17
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	106.8	0.00	433.34	0.00	0.00	774.44
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	108.1	0.00	433.34	0.00	0.00	943.96
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	109.3	0.00	433.34	0.00	0.00	1114.80
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	110.6	0.00	433.34	0.00	0.00	1286.95
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	111.8	0.00	433.34	0.00	0.00	1460.42
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	113.1	0.00	433.34	0.00	0.00	1635.18
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	114.4	0.00	433.34	0.00	0.00	1811.25
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	115.6	0.00	433.34	0.00	0.00	1988.62
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	47.55	445.29	4928.49	2477.33	2177.68
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	47.96	457.34	4967.56	2496.97	2201.30
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	48.37	469.50	5006.56	2516.57	2224.97
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	48.79	481.76	5045.47	2536.13	2248.71
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	49.20	494.13	5084.30	2555.65	2272.50
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	49.61	506.59	5123.04	2575.12	2296.34
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.02	519.16	5161.70	2594.55	2320.25
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	50.43	531.84	5200.27	2613.94	2344.21
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	50.84	544.61	5238.75	2633.28	2368.22
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	51.25	557.49	5277.15	2652.59	2392.30
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	51.66	570.48	5315.46	2671.84	2416.43
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.07	583.56	5353.68	2691.05	2440.61
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	52.48	596.75	5391.81	2710.22	2464.85
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	52.89	610.04	5429.86	2729.34	2489.14
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	53.30	623.44	5467.81	2748.42	2513.49
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	53.71	636.94	5505.67	2767.45	2537.89
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	54.12	650.54	5543.44	2786.44	2562.35
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	54.53	664.24	5581.11	2805.37	2586.86
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	54.94	678.05	5618.70	2824.26	2611.42
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	55.35	691.96	5656.18	2843.11	2636.04
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	55.76	705.98	5693.58	2861.90	2660.71
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	56.17	720.09	5730.87	2880.65	2685.44
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	56.58	734.31	5768.08	2899.35	2710.21
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	56.99	748.64	5805.18	2918.00	2735.04

13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	57.40	763.06	5842.19	2936.60	2759.92
13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	57.81	777.59	5879.09	2955.16	2784.85
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	58.22	792.23	5915.90	2973.66	2809.91
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	58.63	806.96	5952.61	2992.11	2835.11
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.04	821.80	5989.22	3010.51	2860.44
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	59.45	836.74	6025.73	3028.86	2885.90
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	59.86	851.79	6062.13	3047.16	2911.51
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	60.27	866.94	6098.44	3065.41	2937.25
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	60.68	882.19	6134.63	3083.60	2963.14
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.09	897.54	6170.73	3101.75	2989.17
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	61.50	913.00	6206.72	3119.84	3015.36
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	61.91	928.56	6242.60	3137.87	3041.69
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.32	944.22	6280.72	3157.04	3068.17
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	62.73	959.99	6318.80	3176.18	3094.72
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.15	975.86	6356.84	3195.30	3121.35
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	63.56	991.84	6394.84	3214.40	3148.06
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	63.97	1007.91	6432.79	3233.48	3174.84
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.38	1024.09	6470.71	3252.53	3201.69
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	64.79	1040.37	6508.58	3271.57	3228.62
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.20	1056.76	6546.42	3290.59	3255.62
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	65.61	1073.25	6584.21	3309.59	3282.70
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.02	1089.84	6621.96	3328.56	3309.85
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.43	1106.53	6659.67	3347.52	3337.08
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	66.84	1123.33	6697.35	3366.45	3364.38
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.25	1140.23	6734.98	3385.37	3391.75
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	67.66	1157.24	6772.56	3404.26	3419.20
16.3	14.3	11	0.70	0.50	0.86	37.70	43.03	179.7	68.07	1174.35	6810.11	3423.14	3446.73
16.4	14.4	11	0.70	0.50	0.86	37.70	43.01	181.0	68.48	1191.56	6847.62	3441.99	3474.33
16.5	14.5	11	0.70	0.50	0.86	37.70	42.98	182.2	68.89	1208.87	6885.09	3460.82	3502.00
16.6	14.6	11	0.70	0.50	0.86	37.70	42.96	183.5	69.30	1226.29	6922.51	3479.64	3529.75
16.7	14.7	11	0.70	0.50	0.86	37.70	42.94	184.7	69.71	1243.81	6959.90	3498.43	3557.57
16.8	14.8	11	0.70	0.50	0.86	37.70	42.92	186.0	70.12	1261.43	6997.25	3517.20	3585.47
16.9	14.9	11	0.70	0.50	0.86	37.70	42.89	187.2	70.53	1279.16	7034.55	3535.95	3613.44
17.0	15.0	11	0.70	0.50	0.86	37.70	42.87	188.5	70.94	1296.99	7071.82	3554.68	3641.49

1.1.4 Calcolo del carico limite con riferimento alla prova CPTu1

1.1.4.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	1.5	19.35	36		0.70	0.50	0.73
2	1.5	2.0	18.33	22	16	0.70	0.50	0.40
3	2.0	4.1	19.35	36		0.70	0.50	0.73
4	4.1	4.8	18.33	22	25	0.70	0.50	0.40
5	4.8	5.8	19.35	36		0.70	0.50	0.71
6	5.8	7.8	18.33	22	35	0.62	0.50	0.40
7	7.8	8.7	19.35	38		0.70	0.50	0.79
8	8.7	10.5	18.33	22	40	0.58	0.50	0.40
9	10.5	11.8	19.35	36		0.70	0.50	0.73
10	11.8	16.3	19.35	43		0.70	0.50	0.93
11	16.3	16.6	19.35	38		0.70	0.50	0.79
12	16.6	18.7	19.35	41		0.70	0.50	0.86
13	18.7	18.9	19.35	36		0.70	0.50	0.73
14	18.9	20.4	19.35	41		0.70	0.50	0.86
15	20.4	21.0	19.35	36		0.70	0.50	0.73
16	21.0	21.3	19.35	41		0.70	0.50	0.86
17	21.3	24.0	19.35	36		0.70	0.50	0.73

1.1.4.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7812	7730

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	2.8	10.70	4.03	821.24	928.80	800.56	10.70	4.03	821.24	928.80	800.56
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	5.7	11.04	8.20	847.95	959.01	823.73	11.04	8.20	847.95	959.01	823.73
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	8.5	11.39	12.49	874.66	989.22	847.01	11.39	12.49	874.66	989.22	847.01
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	11.3	11.74	16.92	901.37	1019.42	870.40	11.74	16.92	901.37	1019.42	870.40
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	14.1	12.09	21.47	928.08	1049.63	893.91	12.09	21.47	928.08	1049.63	893.91
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	17.0	12.43	26.16	954.79	1079.84	917.54	12.43	26.16	954.79	1079.84	917.54
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	19.8	12.78	30.98	981.49	1110.04	941.28	12.78	30.98	981.49	1110.04	941.28
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	22.6	13.13	35.93	1008.20	1140.25	965.13	13.13	35.93	1008.20	1140.25	965.13
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	25.4	13.48	41.01	1034.91	1170.46	989.09	13.48	41.01	1034.91	1170.46	989.09
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	28.3	13.83	46.22	1061.62	1200.66	1013.17	13.83	46.22	1061.62	1200.66	1013.17
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	31.1	14.17	51.56	1088.33	1230.87	1037.37	14.17	51.56	1088.33	1230.87	1037.37
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	33.9	14.52	57.04	1115.04	1261.08	979.69	14.52	57.04	1115.04	1261.08	969.80
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	36.8	14.87	62.64	1141.75	1291.28	920.24	14.87	62.64	1141.75	1291.28	900.54
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	39.6	15.22	68.38	1168.45	1321.49	859.00	15.22	68.38	1168.45	1321.49	829.60
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	42.4	15.57	74.25	1195.16	1351.70	795.99	15.57	74.25	1195.16	1351.70	756.96
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	45.2	15.91	80.25	1221.87	1381.90	731.19	15.91	80.25	1221.87	1381.90	682.64
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	48.1	16.26	86.38	1248.58	1412.11	664.61	16.26	86.38	1248.58	1412.11	606.62
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	50.9	16.61	92.64	1275.29	1442.32	596.25	16.61	92.64	1275.29	1442.32	528.92
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	53.7	16.96	99.03	1302.00	1472.52	612.41	16.96	99.03	1302.00	1472.52	545.08
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	56.5	17.30	105.56	1328.70	1502.73	628.55	17.30	105.56	1328.70	1502.73	561.22
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	59.4	17.65	112.21	1355.41	1532.94	644.68	17.65	112.21	1355.41	1532.94	577.34
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	62.2	17.50	118.81	305.66	345.69	660.62	9.95	115.96	175.74	198.76	590.82

Breve termine

Lungo termine

Palo

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	65.0	17.50	125.41	307.49	347.76	758.43	10.12	119.78	178.78	202.20	696.10
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	67.9	17.50	132.00	309.32	349.84	858.00	10.30	123.66	181.82	205.64	803.11
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	70.7	17.50	138.60	311.16	351.91	959.33	10.47	127.61	184.86	209.07	911.85
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	73.5	17.50	145.20	312.99	353.98	1062.44	10.64	131.62	187.90	212.51	1022.33
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	76.3	17.50	151.79	314.82	356.06	1167.31	10.81	135.70	190.94	215.95	1134.53
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	79.2	17.50	158.39	316.66	358.13	1273.94	10.99	139.84	193.98	219.39	1248.46
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	82.0	19.75	165.84	1451.54	1641.65	1286.06	19.75	147.28	1451.54	1641.65	1254.94
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	84.8	20.09	173.41	1476.57	1669.96	1211.99	20.09	154.86	1476.57	1669.96	1165.97
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	87.7	20.43	181.12	1501.59	1698.26	1136.27	20.43	162.56	1501.59	1698.26	1075.45
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	90.5	20.77	188.95	1526.62	1726.57	1058.90	20.77	170.39	1526.62	1726.57	983.36
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	93.3	21.11	196.91	1551.65	1754.87	979.86	21.11	178.35	1551.65	1754.87	889.71
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	96.1	21.45	205.00	1576.67	1783.18	899.18	21.45	186.44	1576.67	1783.18	794.50
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	99.0	21.80	213.21	1601.70	1811.48	816.84	21.80	194.66	1601.70	1811.48	697.72
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	101.8	22.14	221.56	1626.73	1839.78	732.85	22.14	203.00	1626.73	1839.78	599.38
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	104.6	22.48	230.03	1651.75	1868.09	647.20	22.48	211.48	1651.75	1868.09	499.48
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	107.4	22.82	238.63	1676.78	1896.39	559.89	22.82	220.08	1676.78	1896.39	398.02
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	110.3	21.70	246.81	427.84	483.87	470.45	13.08	225.01	231.05	261.31	291.69
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	113.1	21.70	254.99	429.67	485.95	476.28	13.26	230.01	234.09	264.75	295.75
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	115.9	21.70	263.18	431.51	488.02	482.10	13.43	235.07	237.13	268.19	299.87
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	118.8	21.70	271.36	433.34	490.09	487.92	13.60	240.20	240.17	271.62	304.05
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	121.6	21.70	279.54	435.17	492.17	493.74	13.77	245.39	243.21	275.06	308.28
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	124.4	21.70	287.72	437.00	494.24	499.56	13.94	250.65	246.25	278.50	312.57
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	127.2	21.70	295.90	438.84	496.31	505.39	14.12	255.97	249.29	281.94	316.92
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	130.1	21.70	304.08	440.67	498.39	511.21	14.29	261.36	252.32	285.37	321.32
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	132.9	21.70	312.26	442.50	500.46	517.03	14.46	266.81	255.36	288.81	325.78
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	135.7	21.70	320.44	444.34	502.53	522.85	14.63	272.33	258.40	292.25	330.30
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	138.5	21.70	328.62	446.17	504.61	717.41	14.81	277.91	261.44	295.68	536.75
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	141.4	21.70	336.80	448.00	506.68	914.43	14.98	283.55	264.48	299.12	745.64
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	144.2	21.70	344.98	449.84	508.75	1113.93	15.15	289.26	267.52	302.56	956.97
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	147.0	21.70	353.16	451.67	510.82	1315.90	15.32	295.04	270.56	306.00	1170.73
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	149.9	21.70	361.34	453.50	512.90	1520.33	15.49	300.88	273.60	309.43	1386.93
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	152.7	21.70	369.52	455.33	514.97	1727.24	15.67	306.79	276.64	312.87	1605.56
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	155.5	21.70	377.71	457.17	517.04	1936.62	15.84	312.76	279.68	316.31	1826.63
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	158.3	21.70	385.89	459.00	519.12	2148.47	16.01	318.79	282.72	319.75	2050.13
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	161.2	21.70	394.07	460.83	521.19	2362.79	16.18	324.90	285.76	323.18	2276.06
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	164.0	21.70	402.25	462.67	523.26	2372.11	16.35	331.06	288.80	326.62	2281.39
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	166.8	32.46	414.49	2942.62	3328.03	2384.95	32.46	343.30	2942.62	3328.03	2292.00
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	169.6	32.84	426.87	2976.90	3366.79	2209.19	32.84	355.68	2976.90	3366.79	2100.85
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	172.5	33.22	439.39	3011.17	3405.55	2031.08	33.22	368.20	3011.17	3405.55	1907.45
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	175.3	33.60	452.05	3045.44	3444.31	1850.63	33.60	380.87	3045.44	3444.31	1711.79
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	178.1	33.97	464.86	3079.71	3483.07	1667.82	33.97	393.67	3079.71	3483.07	1513.87
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	181.0	34.35	477.81	3113.98	3521.83	1482.67	34.35	406.62	3113.98	3521.83	1313.71
8.5	6.5	7	0.70	0.50	0.79	35.40	35.92	183.8	34.73	490.90	3148.25	3560.59	1295.18	34.73	419.72	3148.25	3560.59	1111.28
8.6	6.6	7	0.70	0.50	0.79	35.40	35.92	186.6	35.11	504.14	3182.53	3599.35	1105.34	35.11	432.95	3182.53	3599.35	906.60
8.7	6.7	7	0.70	0.50	0.79	35.40	35.92	189.4	35.49	517.52	3216.80	3638.11	913.15	35.49	446.33	3216.80	3638.11	699.67
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	192.3	23.20	526.26	526.91	595.93	714.46	18.26	453.21	322.46	364.70	484.71
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	195.1	23.20	535.01	528.75	598.00	720.77	18.43	460.16	325.50	368.13	490.47

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	197.9	23.20	543.76	530.58	600.07	727.09	18.61	467.18	328.54	371.57	496.29
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	200.7	23.20	552.50	532.41	602.14	733.40	18.78	474.26	331.58	375.01	502.17
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	203.6	23.20	561.25	534.25	604.22	739.71	18.95	481.40	334.62	378.45	508.10
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	206.4	23.20	569.99	536.08	606.29	746.03	19.12	488.61	337.66	381.88	514.08
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	209.2	23.20	578.74	537.91	608.36	752.34	19.29	495.88	340.70	385.32	520.13
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	212.1	23.20	587.49	539.75	610.44	758.65	19.47	503.22	343.74	388.76	526.23
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	214.9	23.20	596.23	541.58	612.51	947.98	19.64	510.62	346.78	392.20	729.32
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	217.7	23.20	604.98	543.41	614.58	1139.21	19.81	518.09	349.82	395.63	934.27
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	220.5	23.20	613.73	545.24	616.66	1332.33	19.98	525.63	352.86	399.07	1141.07
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	223.4	23.20	622.47	547.08	618.73	1527.34	20.15	533.22	355.90	402.51	1349.74
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	226.2	23.20	631.22	548.91	620.80	1724.25	20.33	540.89	358.93	405.95	1560.27
10.1	8.1	8	0.58	0.50	0.40	19.00	3.57	229.0	23.20	639.96	550.74	622.88	1923.05	20.50	548.62	361.97	409.38	1772.65
10.2	8.2	8	0.58	0.50	0.40	19.00	3.57	231.8	23.20	648.71	552.58	624.95	2123.75	20.67	556.41	365.01	412.82	1986.90
10.3	8.3	8	0.58	0.50	0.40	19.00	3.57	234.7	23.20	657.46	554.41	627.02	2326.34	20.84	564.27	368.05	416.26	2203.00
10.4	8.4	8	0.58	0.50	0.40	19.00	3.57	237.5	23.20	666.20	556.24	629.09	2530.82	21.02	572.19	371.09	419.70	2420.96
10.5	8.5	8	0.58	0.50	0.40	19.00	3.57	240.3	23.20	674.95	558.08	631.17	2737.20	21.19	580.18	374.13	423.13	2640.78
10.6	8.6	9	0.70	0.50	0.73	33.10	28.00	243.2	38.59	689.50	2962.96	3351.03	2950.52	38.59	594.72	2962.96	3351.03	2868.11
10.7	8.7	9	0.70	0.50	0.73	33.10	28.00	246.0	38.94	704.17	2989.67	3381.24	2982.73	38.94	609.40	2989.67	3381.24	2900.32
10.8	8.8	9	0.70	0.50	0.73	33.10	28.00	248.8	39.28	718.98	3016.38	3411.44	3014.96	39.28	624.21	3016.38	3411.44	2932.54
10.9	8.9	9	0.70	0.50	0.73	33.10	28.00	251.6	39.63	733.92	3043.09	3441.65	3303.94	39.63	639.15	3043.09	3441.65	3221.53
11.0	9.0	9	0.70	0.50	0.73	33.10	28.00	254.5	39.98	749.00	3069.79	3471.86	3594.92	39.98	654.22	3069.79	3471.86	3512.51
11.1	9.1	9	0.70	0.50	0.73	33.10	28.00	257.3	40.33	764.20	3096.50	3502.06	3887.90	40.33	669.43	3096.50	3502.06	3805.49
11.2	9.2	9	0.70	0.50	0.73	33.10	28.00	260.1	40.67	779.53	3123.21	3532.27	4182.87	40.67	684.76	3123.21	3532.27	4100.46
11.3	9.3	9	0.70	0.50	0.73	33.10	28.00	263.0	41.02	795.00	3149.92	3562.48	4479.83	41.02	700.22	3149.92	3562.48	4397.42
11.4	9.4	9	0.70	0.50	0.73	33.10	28.00	265.8	41.37	810.59	3176.63	3592.68	4778.77	41.37	715.82	3176.63	3592.68	4696.36
11.5	9.5	9	0.70	0.50	0.73	33.10	28.00	268.6	41.72	826.32	3203.34	3622.89	5079.70	41.72	731.55	3203.34	3622.89	4997.28
11.6	9.6	9	0.70	0.50	0.73	33.10	28.00	271.4	42.07	842.18	3230.05	3653.10	5382.60	42.07	747.41	3230.05	3653.10	5300.18
11.7	9.7	9	0.70	0.50	0.73	33.10	27.98	274.3	42.41	858.17	3255.43	3681.81	5687.47	42.41	763.40	3255.43	3681.81	5605.06
11.8	9.8	9	0.70	0.50	0.73	33.10	27.97	277.1	42.76	874.29	3280.79	3710.49	5994.41	42.76	779.52	3280.79	3710.49	5912.00
11.9	9.9	10	0.70	0.50	0.93	40.00	56.47	279.9	55.13	895.07	6677.32	7551.88	6307.36	55.13	800.30	6677.32	7551.88	6224.95
12.0	10.0	10	0.70	0.50	0.93	40.00	56.45	282.7	55.57	916.02	6728.80	7610.09	6365.66	55.57	821.25	6728.80	7610.09	6283.24
12.1	10.1	10	0.70	0.50	0.93	40.00	56.43	285.6	56.02	937.14	6780.23	7668.25	6424.05	56.02	842.37	6780.23	7668.25	6341.64
12.2	10.2	10	0.70	0.50	0.93	40.00	56.41	288.4	56.46	958.43	6831.60	7726.36	6482.55	56.46	863.66	6831.60	7726.36	6400.14
12.3	10.3	10	0.70	0.50	0.93	40.00	56.39	291.2	56.91	979.88	6882.92	7784.40	6541.15	56.91	885.11	6882.92	7784.40	6458.74
12.4	10.4	10	0.70	0.50	0.93	40.00	56.37	294.1	57.35	1001.50	6934.19	7842.38	6599.85	57.35	906.73	6934.19	7842.38	6517.44
12.5	10.5	10	0.70	0.50	0.93	40.00	56.35	296.9	57.80	1023.29	6985.40	7900.31	6658.65	57.80	928.52	6985.40	7900.31	6576.24
12.6	10.6	10	0.70	0.50	0.93	40.00	56.33	299.7	58.24	1045.25	7036.57	7958.17	6717.55	58.24	950.48	7036.57	7958.17	6635.14
12.7	10.7	10	0.70	0.50	0.93	40.00	56.31	302.5	58.69	1067.37	7087.68	8015.97	6776.55	58.69	972.60	7087.68	8015.97	6694.14
12.8	10.8	10	0.70	0.50	0.93	40.00	56.29	305.4	59.13	1089.67	7138.73	8073.72	6835.65	59.13	994.89	7138.73	8073.72	6753.23
12.9	10.9	10	0.70	0.50	0.93	40.00	56.27	308.2	59.58	1112.13	7189.73	8131.40	6894.84	59.58	1017.35	7189.73	8131.40	6812.43
13.0	11.0	10	0.70	0.50	0.93	40.00	56.25	311.0	60.02	1134.75	7240.68	8189.02	6954.14	60.02	1039.98	7240.68	8189.02	6871.73
13.1	11.1	10	0.70	0.50	0.93	40.00	56.23	313.8	60.47	1157.55	7291.57	8246.58	7013.53	60.47	1062.78	7291.57	8246.58	6931.12
13.2	11.2	10	0.70	0.50	0.93	40.00	56.20	316.7	60.91	1180.51	7342.41	8304.07	7073.03	60.91	1085.74	7342.41	8304.07	6990.61
13.3	11.3	10	0.70	0.50	0.93	40.00	56.18	319.5	61.36	1203.64	7393.19	8361.50	7132.62	61.36	1108.87	7393.19	8361.50	7050.21
13.4	11.4	10	0.70	0.50	0.93	40.00	56.16	322.3	61.80	1226.94	7443.92	8418.87	7192.31	61.80	1132.17	7443.92	8418.87	7109.89
13.5	11.5	10	0.70	0.50	0.93	40.00	56.14	325.2	62.25	1250.41	7494.59	8476.18	7252.09	62.25	1155.63	7494.59	8476.18	7169.68
13.6	11.6	10	0.70	0.50	0.93	40.00	56.12	328.0	62.69	1274.04	7545.20	8533.42	7311.97	62.69	1179.27	7545.20	8533.42	7229.56

13.7	11.7	10	0.70	0.50	0.93	40.00	56.10	330.8	63.14	1297.84	7595.76	8590.60	7371.95	63.14	1203.07	7595.76	8590.60	7289.54
13.8	11.8	10	0.70	0.50	0.93	40.00	56.07	333.6	63.58	1321.81	7646.26	8647.71	7432.03	63.58	1227.04	7646.26	8647.71	7349.62
13.9	11.9	10	0.70	0.50	0.93	40.00	56.05	336.5	64.02	1345.95	7696.70	8704.76	7492.20	64.02	1251.17	7696.70	8704.76	7409.79
14.0	12.0	10	0.70	0.50	0.93	40.00	56.03	339.3	64.47	1370.25	7747.08	8761.74	7552.47	64.47	1275.48	7747.08	8761.74	7470.06
14.1	12.1	10	0.70	0.50	0.93	40.00	56.01	342.1	64.91	1394.72	7797.41	8818.66	7612.83	64.91	1299.95	7797.41	8818.66	7530.42
14.2	12.2	10	0.70	0.50	0.93	40.00	55.98	344.9	65.36	1419.36	7847.67	8875.51	7673.29	65.36	1324.59	7847.67	8875.51	7590.88
14.3	12.3	10	0.70	0.50	0.93	40.00	55.96	347.8	65.80	1444.17	7897.88	8932.29	7733.84	65.80	1349.40	7897.88	8932.29	7651.43
14.4	12.4	10	0.70	0.50	0.93	40.00	55.94	350.6	66.25	1469.15	7948.03	8989.01	7794.49	66.25	1374.37	7948.03	8989.01	7712.08
14.5	12.5	10	0.70	0.50	0.93	40.00	55.92	353.4	66.69	1494.29	7998.12	9045.66	7855.23	66.69	1399.52	7998.12	9045.66	7772.82
14.6	12.6	10	0.70	0.50	0.93	40.00	55.89	356.3	67.14	1519.60	8048.15	9102.24	7916.07	67.14	1424.83	8048.15	9102.24	7833.66
14.7	12.7	10	0.70	0.50	0.93	40.00	55.87	359.1	67.58	1545.08	8098.12	9158.75	7977.00	67.58	1450.30	8098.12	9158.75	7894.59
14.8	12.8	10	0.70	0.50	0.93	40.00	55.85	361.9	68.03	1570.72	8148.02	9215.20	8038.02	68.03	1475.95	8148.02	9215.20	7955.61
14.9	12.9	10	0.70	0.50	0.93	40.00	55.82	364.7	68.47	1596.54	8197.87	9271.57	8099.14	68.47	1501.76	8197.87	9271.57	8016.73
15.0	13.0	10	0.70	0.50	0.93	40.00	55.80	367.6	68.92	1622.52	8247.65	9327.88	8160.35	68.92	1527.74	8247.65	9327.88	8077.94
15.1	13.1	10	0.70	0.50	0.93	40.00	55.78	370.4	69.36	1648.67	8297.38	9384.11	8221.65	69.36	1553.89	8297.38	9384.11	8139.24
15.2	13.2	10	0.70	0.50	0.93	40.00	55.75	373.2	69.81	1674.98	8347.04	9440.28	8283.04	69.81	1580.21	8347.04	9440.28	8200.63
15.3	13.3	10	0.70	0.50	0.93	40.00	55.73	376.0	70.25	1701.47	8396.64	9496.37	8344.53	70.25	1606.70	8396.64	9496.37	8262.12
15.4	13.4	10	0.70	0.50	0.93	40.00	55.70	378.9	70.70	1728.12	8446.17	9552.40	8157.21	70.70	1633.35	8446.17	9552.40	8074.80
15.5	13.5	10	0.70	0.50	0.93	40.00	55.68	381.7	71.14	1754.94	8495.64	9608.35	7968.60	71.14	1660.17	8495.64	9608.35	7886.19
15.6	13.6	10	0.70	0.50	0.93	40.00	55.66	384.5	71.59	1781.93	8545.05	9664.23	7778.72	71.59	1687.15	8545.05	9664.23	7696.31
15.7	13.7	10	0.70	0.50	0.93	40.00	55.63	387.4	72.03	1809.08	8594.40	9720.03	7703.57	72.03	1714.31	8594.40	9720.03	7621.15
15.8	13.8	10	0.70	0.50	0.93	40.00	55.61	390.2	72.48	1836.41	8643.68	9775.77	7627.76	72.48	1741.63	8643.68	9775.77	7545.35
15.9	13.9	10	0.70	0.50	0.93	40.00	55.58	393.0	72.92	1863.90	8692.89	9831.43	7551.30	72.92	1769.12	8692.89	9831.43	7468.89
16.0	14.0	10	0.70	0.50	0.93	40.00	55.56	395.8	73.37	1891.55	8742.04	9887.02	7474.20	73.37	1796.78	8742.04	9887.02	7391.78
16.1	14.1	10	0.70	0.50	0.93	40.00	55.53	398.7	73.81	1919.38	8791.13	9942.53	7396.44	73.81	1824.61	8791.13	9942.53	7314.02
16.2	14.2	10	0.70	0.50	0.93	40.00	55.51	401.5	74.26	1947.37	8840.15	9997.97	7318.03	74.26	1852.60	8840.15	9997.97	7235.62
16.3	14.3	10	0.70	0.50	0.93	40.00	55.48	404.3	74.70	1975.54	8889.10	10053.34	7238.97	74.70	1880.76	8889.10	10053.34	7156.56
16.4	14.4	11	0.70	0.50	0.79	35.40	35.18	407.2	63.87	1999.61	5669.89	6412.50	7155.57	63.87	1904.84	5669.89	6412.50	7073.15
16.5	14.5	11	0.70	0.50	0.79	35.40	35.16	410.0	64.25	2023.83	5700.66	6447.30	7320.39	64.25	1929.06	5700.66	6447.30	7237.98
16.6	14.6	11	0.70	0.50	0.79	35.40	35.15	412.8	64.63	2048.20	5731.38	6482.04	7485.92	64.63	1953.42	5731.38	6482.04	7403.51
16.7	14.7	12	0.70	0.50	0.86	37.70	44.42	415.6	70.54	2074.79	7285.35	8239.54	7653.97	70.54	1980.02	7285.35	8239.54	7571.56
16.8	14.8	12	0.70	0.50	0.86	37.70	44.39	418.5	70.95	2101.54	7324.22	8283.49	7706.72	70.95	2006.77	7324.22	8283.49	7624.31
16.9	14.9	12	0.70	0.50	0.86	37.70	44.37	421.3	71.36	2128.44	7363.02	8327.38	7759.56	71.36	2033.67	7363.02	8327.38	7677.15
17.0	15.0	12	0.70	0.50	0.86	37.70	44.35	424.1	71.77	2155.50	7401.77	8371.21	7812.48	71.77	2060.73	7401.77	8371.21	7730.07

1.1.4.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	5613	5544

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	2.0	10.70	3.36	821.24	645.00	556.43	10.70	3.36	821.24	645.00	556.43
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	3.9	11.04	6.83	847.95	665.98	573.02	11.04	6.83	847.95	665.98	573.02
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	5.9	11.39	10.41	874.66	686.96	589.71	11.39	10.41	874.66	686.96	589.71
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	7.9	11.74	14.10	901.37	707.93	606.49	11.74	14.10	901.37	707.93	606.49
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	9.8	12.09	17.89	928.08	728.91	623.37	12.09	17.89	928.08	728.91	623.37
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	11.8	12.43	21.80	954.79	749.89	640.34	12.43	21.80	954.79	749.89	640.34
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	13.7	12.78	25.82	981.49	770.86	657.41	12.78	25.82	981.49	770.86	657.41
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	15.7	13.13	29.94	1008.20	791.84	674.57	13.13	29.94	1008.20	791.84	674.57
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	17.7	13.48	34.17	1034.91	812.82	691.82	13.48	34.17	1034.91	812.82	691.82
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	19.6	13.83	38.52	1061.62	833.79	709.18	13.83	38.52	1061.62	833.79	709.18
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	21.6	14.17	42.97	1088.33	854.77	726.62	14.17	42.97	1088.33	854.77	726.62
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	23.6	14.52	47.53	1115.04	875.75	687.23	14.52	47.53	1115.04	875.75	680.36
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	25.5	14.87	52.20	1141.75	896.72	646.62	14.87	52.20	1141.75	896.72	632.94
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	27.5	15.22	56.98	1168.45	917.70	604.79	15.22	56.98	1168.45	917.70	584.37
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	29.5	15.57	61.87	1195.16	938.68	561.74	15.57	61.87	1195.16	938.68	534.63
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	31.4	15.91	66.87	1221.87	959.65	517.46	15.91	66.87	1221.87	959.65	483.74
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	33.4	16.26	71.98	1248.58	980.63	471.97	16.26	71.98	1248.58	980.63	431.70
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	35.3	16.61	77.20	1275.29	1001.61	425.25	16.61	77.20	1275.29	1001.61	378.50
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	37.3	16.96	82.53	1302.00	1022.59	437.24	16.96	82.53	1302.00	1022.59	390.49
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	39.3	17.30	87.96	1328.70	1043.56	449.24	17.30	87.96	1328.70	1043.56	402.48
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	41.2	17.65	93.51	1355.41	1064.54	461.24	17.65	93.51	1355.41	1064.54	414.49
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	43.2	17.50	99.01	305.66	240.06	473.12	9.95	96.64	175.74	138.03	424.30

Breve termine

Lungo termine

Palo

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	45.2	17.50	104.50	307.49	241.50	541.83	10.12	99.82	178.78	140.42	497.87
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	47.1	17.50	110.00	309.32	242.94	611.77	10.30	103.05	181.82	142.80	572.65
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	49.1	17.50	115.50	311.16	244.38	682.94	10.47	106.34	184.86	145.19	648.64
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	51.1	17.50	121.00	312.99	245.82	755.34	10.64	109.68	187.90	147.58	725.84
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	53.0	17.50	126.50	314.82	247.26	828.96	10.81	113.08	190.94	149.96	804.26
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	55.0	17.50	131.99	316.66	248.70	903.81	10.99	116.53	193.98	152.35	883.88
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	56.9	19.75	138.20	1451.54	1140.04	913.12	19.75	122.74	1451.54	1140.04	889.27
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	58.9	20.09	144.51	1476.57	1159.69	862.60	20.09	129.05	1476.57	1159.69	828.41
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	60.9	20.43	150.93	1501.59	1179.35	810.95	20.43	135.47	1501.59	1179.35	766.47
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	62.8	20.77	157.46	1526.62	1199.01	758.16	20.77	141.99	1526.62	1199.01	703.47
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	64.8	21.11	164.09	1551.65	1218.66	704.24	21.11	148.63	1551.65	1218.66	639.40
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	66.8	21.45	170.83	1576.67	1238.32	649.19	21.45	155.37	1576.67	1238.32	574.25
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	68.7	21.80	177.68	1601.70	1257.97	593.00	21.80	162.21	1601.70	1257.97	508.04
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	70.7	22.14	184.63	1626.73	1277.63	535.68	22.14	169.17	1626.73	1277.63	440.76
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	72.6	22.48	191.69	1651.75	1297.28	477.22	22.48	176.23	1651.75	1297.28	372.40
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	74.6	22.82	198.86	1676.78	1316.94	417.63	22.82	183.40	1676.78	1316.94	302.98
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	76.6	21.70	205.68	427.84	336.02	356.51	13.08	187.51	231.05	181.47	229.74
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	78.5	21.70	212.50	429.67	337.46	361.54	13.26	191.67	234.09	183.85	233.16
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	80.5	21.70	219.31	431.51	338.90	366.57	13.43	195.89	237.13	186.24	236.63
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	82.5	21.70	226.13	433.34	340.34	371.61	13.60	200.17	240.17	188.63	240.15
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	84.4	21.70	232.95	435.17	341.78	376.64	13.77	204.49	243.21	191.01	243.72
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	86.4	21.70	239.76	437.00	343.22	381.67	13.94	208.87	246.25	193.40	247.34
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	88.4	21.70	246.58	438.84	344.66	386.70	14.12	213.31	249.29	195.79	251.00
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	90.3	21.70	253.40	440.67	346.10	391.73	14.29	217.80	252.32	198.18	254.71
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	92.3	21.70	260.22	442.50	347.54	396.76	14.46	222.34	255.36	200.56	258.46
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	94.2	21.70	267.03	444.34	348.98	401.79	14.63	226.94	258.40	202.95	262.26
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	96.2	21.70	273.85	446.17	350.42	537.89	14.81	231.59	261.44	205.34	406.31
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	98.2	21.70	280.67	448.00	351.86	675.70	14.98	236.29	264.48	207.72	552.05
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	100.1	21.70	287.49	449.84	353.30	815.23	15.15	241.05	267.52	210.11	699.50
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	102.1	21.70	294.30	451.67	354.74	956.47	15.32	245.87	270.56	212.50	848.64
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	104.1	21.70	301.12	453.50	356.18	1099.43	15.49	250.73	273.60	214.88	999.48
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	106.0	21.70	307.94	455.33	357.62	1244.10	15.67	255.66	276.64	217.27	1152.02
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	108.0	21.70	314.75	457.17	359.06	1390.49	15.84	260.63	279.68	219.66	1306.26
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	110.0	21.70	321.57	459.00	360.50	1538.60	16.01	265.66	282.72	222.05	1462.20
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	111.9	21.70	328.39	460.83	361.94	1688.42	16.18	270.75	285.76	224.43	1619.84
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	113.9	21.70	335.21	462.67	363.38	1695.88	16.35	275.88	288.80	226.82	1624.28
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	115.8	32.46	345.40	2942.62	2311.13	1706.28	32.46	286.08	2942.62	2311.13	1633.13
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	117.8	32.84	355.72	2976.90	2338.05	1585.71	32.84	296.40	2976.90	2338.05	1501.88
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	119.8	33.22	366.16	3011.17	2364.97	1463.54	33.22	306.83	3011.17	2364.97	1369.09
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	121.7	33.60	376.71	3045.44	2391.88	1339.75	33.60	317.39	3045.44	2391.88	1234.74
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	123.7	33.97	387.38	3079.71	2418.80	1214.35	33.97	328.06	3079.71	2418.80	1098.85
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	125.7	34.35	398.18	3113.98	2445.72	1087.34	34.35	338.85	3113.98	2445.72	961.40
8.5	6.5	7	0.70	0.50	0.79	35.40	35.92	127.6	34.73	409.09	3148.25	2472.63	958.72	34.73	349.76	3148.25	2472.63	822.41
8.6	6.6	7	0.70	0.50	0.79	35.40	35.92	129.6	35.11	420.12	3182.53	2499.55	828.48	35.11	360.79	3182.53	2499.55	681.87
8.7	6.7	7	0.70	0.50	0.79	35.40	35.92	131.6	35.49	431.26	3216.80	2526.47	696.63	35.49	371.94	3216.80	2526.47	539.79
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	133.5	23.20	438.55	526.91	413.84	559.71	18.26	377.68	322.46	253.26	391.34
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	135.5	23.20	445.84	528.75	415.28	565.15	18.43	383.47	325.50	255.65	396.18

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	137.4	23.20	453.13	530.58	416.72	570.59	18.61	389.31	328.54	258.04	401.07
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	139.4	23.20	460.42	532.41	418.16	576.03	18.78	395.21	331.58	260.42	405.99
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	141.4	23.20	467.71	534.25	419.60	581.47	18.95	401.17	334.62	262.81	410.95
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	143.3	23.20	475.00	536.08	421.04	586.91	19.12	407.17	337.66	265.20	415.93
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	145.3	23.20	482.28	537.91	422.48	592.36	19.29	413.24	340.70	267.58	420.96
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	147.3	23.20	489.57	539.75	423.91	597.80	19.47	419.35	343.74	269.97	426.01
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	149.2	23.20	496.86	541.58	425.35	729.87	19.64	425.52	346.78	272.36	567.47
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	151.2	23.20	504.15	543.41	426.79	863.17	19.81	431.74	349.82	274.75	710.15
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	153.2	23.20	511.44	545.24	428.23	997.70	19.98	438.02	352.86	277.13	854.05
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	155.1	23.20	518.73	547.08	429.67	1133.46	20.15	444.35	355.90	279.52	999.15
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	157.1	23.20	526.01	548.91	431.11	1270.45	20.33	450.74	358.93	281.91	1145.47
10.1	8.1	8	0.58	0.50	0.40	19.00	3.56	159.0	23.20	533.30	550.74	432.55	1408.66	20.50	457.18	361.73	284.10	1292.99
10.2	8.2	8	0.58	0.50	0.40	19.00	3.56	161.0	23.20	540.59	552.58	433.99	1548.10	20.67	463.67	364.52	286.29	1441.73
10.3	8.3	8	0.58	0.50	0.40	19.00	3.56	163.0	23.20	547.88	554.41	435.43	1688.75	20.84	470.22	367.30	288.48	1591.69
10.4	8.4	8	0.58	0.50	0.40	19.00	3.56	164.9	23.20	555.17	556.24	436.87	1830.63	21.02	476.82	370.08	290.66	1742.86
10.5	8.5	8	0.58	0.50	0.40	19.00	3.56	166.9	23.20	562.46	558.08	438.31	1973.72	21.19	483.48	372.85	292.84	1895.25
10.6	8.6	9	0.70	0.50	0.73	33.10	27.91	168.9	38.59	574.58	2954.19	2320.21	2122.23	38.59	495.60	2954.19	2320.21	2053.55
10.7	8.7	9	0.70	0.50	0.73	33.10	27.90	170.8	38.94	586.81	2979.31	2339.95	2145.41	38.94	507.83	2979.31	2339.95	2076.74
10.8	8.8	9	0.70	0.50	0.73	33.10	27.89	172.8	39.28	599.15	3004.40	2359.65	2168.67	39.28	520.18	3004.40	2359.65	2100.00
10.9	8.9	9	0.70	0.50	0.73	33.10	27.87	174.8	39.63	611.60	3029.46	2379.33	2369.17	39.63	532.63	3029.46	2379.33	2300.50
11.0	9.0	9	0.70	0.50	0.73	33.10	27.86	176.7	39.98	624.16	3054.48	2398.98	2571.10	39.98	545.19	3054.48	2398.98	2502.42
11.1	9.1	9	0.70	0.50	0.73	33.10	27.84	178.7	40.33	636.83	3079.46	2418.60	2774.46	40.33	557.85	3079.46	2418.60	2705.78
11.2	9.2	9	0.70	0.50	0.73	33.10	27.83	180.6	40.67	649.61	3104.41	2438.20	2979.24	40.67	570.63	3104.41	2438.20	2910.56
11.3	9.3	9	0.70	0.50	0.73	33.10	27.81	182.6	41.02	662.50	3129.32	2457.76	3185.44	41.02	583.52	3129.32	2457.76	3116.77
11.4	9.4	9	0.70	0.50	0.73	33.10	27.80	184.6	41.37	675.50	3154.20	2477.30	3393.07	41.37	596.52	3154.20	2477.30	3324.39
11.5	9.5	9	0.70	0.50	0.73	33.10	27.78	186.5	41.72	688.60	3179.04	2496.81	3602.11	41.72	609.62	3179.04	2496.81	3533.44
11.6	9.6	9	0.70	0.50	0.73	33.10	27.77	188.5	42.07	701.82	3203.84	2516.29	3812.58	42.07	622.84	3203.84	2516.29	3743.90
11.7	9.7	9	0.70	0.50	0.73	33.10	27.75	190.5	42.41	715.14	3228.60	2535.74	4024.46	42.41	636.16	3228.60	2535.74	3955.78
11.8	9.8	9	0.70	0.50	0.73	33.10	27.74	192.4	42.76	728.58	3253.33	2555.16	4237.75	42.76	649.60	3253.33	2555.16	4169.08
11.9	9.9	10	0.70	0.50	0.93	40.00	56.06	194.4	55.13	745.89	6627.77	5205.44	4455.74	55.13	666.92	6627.77	5205.44	4387.07
12.0	10.0	10	0.70	0.50	0.93	40.00	56.03	196.3	55.57	763.35	6678.05	5244.93	4498.00	55.57	684.38	6678.05	5244.93	4429.33
12.1	10.1	10	0.70	0.50	0.93	40.00	56.00	198.3	56.02	780.95	6728.27	5284.37	4540.35	56.02	701.97	6728.27	5284.37	4471.67
12.2	10.2	10	0.70	0.50	0.93	40.00	55.97	200.3	56.46	798.69	6778.41	5323.75	4582.76	56.46	719.71	6778.41	5323.75	4514.09
12.3	10.3	10	0.70	0.50	0.93	40.00	55.95	202.2	56.91	816.57	6828.48	5363.07	4625.26	56.91	737.59	6828.48	5363.07	4556.59
12.4	10.4	10	0.70	0.50	0.93	40.00	55.92	204.2	57.35	834.59	6878.48	5402.34	4667.84	57.35	755.61	6878.48	5402.34	4599.16
12.5	10.5	10	0.70	0.50	0.93	40.00	55.89	206.2	57.80	852.74	6928.40	5441.55	4710.49	57.80	773.77	6928.40	5441.55	4641.82
12.6	10.6	10	0.70	0.50	0.93	40.00	55.86	208.1	58.24	871.04	6978.25	5480.71	4753.22	58.24	792.06	6978.25	5480.71	4684.55
12.7	10.7	10	0.70	0.50	0.93	40.00	55.84	210.1	58.69	889.48	7028.03	5519.80	4796.03	58.69	810.50	7028.03	5519.80	4727.36
12.8	10.8	10	0.70	0.50	0.93	40.00	55.81	212.1	59.13	908.06	7077.74	5558.84	4838.92	59.13	829.08	7077.74	5558.84	4770.24
12.9	10.9	10	0.70	0.50	0.93	40.00	55.78	214.0	59.58	926.77	7127.37	5597.82	4881.88	59.58	847.79	7127.37	5597.82	4813.20
13.0	11.0	10	0.70	0.50	0.93	40.00	55.75	216.0	60.02	945.63	7176.92	5636.74	4924.92	60.02	866.65	7176.92	5636.74	4856.24
13.1	11.1	10	0.70	0.50	0.93	40.00	55.72	217.9	60.47	964.62	7226.40	5675.60	4968.03	60.47	885.65	7226.40	5675.60	4899.35
13.2	11.2	10	0.70	0.50	0.93	40.00	55.69	219.9	60.91	983.76	7275.80	5714.40	5011.22	60.91	904.78	7275.80	5714.40	4942.54
13.3	11.3	10	0.70	0.50	0.93	40.00	55.67	221.9	61.36	1003.04	7325.13	5753.14	5054.49	61.36	924.06	7325.13	5753.14	4985.81
13.4	11.4	10	0.70	0.50	0.93	40.00	55.64	223.8	61.80	1022.45	7374.38	5791.82	5097.83	61.80	943.47	7374.38	5791.82	5029.15
13.5	11.5	10	0.70	0.50	0.93	40.00	55.61	225.8	62.25	1042.01	7423.55	5830.44	5141.24	62.25	963.03	7423.55	5830.44	5072.56
13.6	11.6	10	0.70	0.50	0.93	40.00	55.58	227.8	62.69	1061.70	7472.64	5869.00	5184.73	62.69	982.72	7472.64	5869.00	5116.05

13.7	11.7	10	0.70	0.50	0.93	40.00	55.55	229.7	63.14	1081.53	7521.65	5907.49	5228.29	63.14	1002.56	7521.65	5907.49	5159.62
13.8	11.8	10	0.70	0.50	0.93	40.00	55.52	231.7	63.58	1101.51	7570.59	5945.92	5271.93	63.58	1022.53	7570.59	5945.92	5203.25
13.9	11.9	10	0.70	0.50	0.93	40.00	55.49	233.7	64.02	1121.62	7619.44	5984.29	5315.64	64.02	1042.64	7619.44	5984.29	5246.96
14.0	12.0	10	0.70	0.50	0.93	40.00	55.46	235.6	64.47	1141.88	7668.21	6022.60	5359.42	64.47	1062.90	7668.21	6022.60	5290.75
14.1	12.1	10	0.70	0.50	0.93	40.00	55.43	237.6	64.91	1162.27	7716.91	6060.84	5403.28	64.91	1083.29	7716.91	6060.84	5334.60
14.2	12.2	10	0.70	0.50	0.93	40.00	55.40	239.5	65.36	1182.80	7765.52	6099.02	5447.21	65.36	1103.82	7765.52	6099.02	5378.53
14.3	12.3	10	0.70	0.50	0.93	40.00	55.37	241.5	65.80	1203.48	7814.05	6137.14	5491.21	65.80	1124.50	7814.05	6137.14	5422.53
14.4	12.4	10	0.70	0.50	0.93	40.00	55.34	243.5	66.25	1224.29	7862.49	6175.19	5535.28	66.25	1145.31	7862.49	6175.19	5466.60
14.5	12.5	10	0.70	0.50	0.93	40.00	55.31	245.4	66.69	1245.24	7910.86	6213.17	5579.42	66.69	1166.26	7910.86	6213.17	5510.75
14.6	12.6	10	0.70	0.50	0.93	40.00	55.27	247.4	67.14	1266.33	7959.13	6251.09	5623.64	67.14	1187.35	7959.13	6251.09	5554.96
14.7	12.7	10	0.70	0.50	0.93	40.00	55.24	249.4	67.58	1287.56	8007.33	6288.94	5667.93	67.58	1208.59	8007.33	6288.94	5599.25
14.8	12.8	10	0.70	0.50	0.93	40.00	55.21	251.3	68.03	1308.94	8055.44	6326.73	5712.28	68.03	1229.96	8055.44	6326.73	5643.61
14.9	12.9	10	0.70	0.50	0.93	40.00	55.18	253.3	68.47	1330.45	8103.46	6364.45	5756.71	68.47	1251.47	8103.46	6364.45	5688.03
15.0	13.0	10	0.70	0.50	0.93	40.00	55.15	255.3	68.92	1352.10	8151.40	6402.10	5801.21	68.92	1273.12	8151.40	6402.10	5732.53
15.1	13.1	10	0.70	0.50	0.93	40.00	55.12	257.2	69.36	1373.89	8199.26	6439.68	5845.77	69.36	1294.91	8199.26	6439.68	5777.10
15.2	13.2	10	0.70	0.50	0.93	40.00	55.08	259.2	69.81	1395.82	8247.02	6477.20	5890.41	69.81	1316.84	8247.02	6477.20	5821.73
15.3	13.3	10	0.70	0.50	0.93	40.00	55.05	261.1	70.25	1417.89	8294.70	6514.64	5935.11	70.25	1338.91	8294.70	6514.64	5866.44
15.4	13.4	10	0.70	0.50	0.93	40.00	55.02	263.1	70.70	1440.10	8342.29	6552.02	5809.15	70.70	1361.12	8342.29	6552.02	5740.47
15.5	13.5	10	0.70	0.50	0.93	40.00	54.99	265.1	71.14	1462.45	8389.79	6589.33	5682.34	71.14	1383.47	8389.79	6589.33	5613.67
15.6	13.6	10	0.70	0.50	0.93	40.00	54.95	267.0	71.59	1484.94	8437.20	6626.56	5554.69	71.59	1405.96	8437.20	6626.56	5486.01
15.7	13.7	10	0.70	0.50	0.93	40.00	54.92	269.0	72.03	1507.57	8484.52	6663.73	5505.71	72.03	1428.59	8484.52	6663.73	5437.04
15.8	13.8	10	0.70	0.50	0.93	40.00	54.89	271.0	72.48	1530.34	8531.76	6700.83	5456.31	72.48	1451.36	8531.76	6700.83	5387.63
15.9	13.9	10	0.70	0.50	0.93	40.00	54.85	272.9	72.92	1553.25	8578.90	6737.85	5406.48	72.92	1474.27	8578.90	6737.85	5337.80
16.0	14.0	10	0.70	0.50	0.93	40.00	54.82	274.9	73.37	1576.30	8625.94	6774.80	5356.22	73.37	1497.32	8625.94	6774.80	5287.54
16.1	14.1	10	0.70	0.50	0.93	40.00	54.79	276.9	73.81	1599.48	8672.90	6811.68	5305.54	73.81	1520.51	8672.90	6811.68	5236.86
16.2	14.2	10	0.70	0.50	0.93	40.00	54.75	278.8	74.26	1622.81	8719.77	6848.49	5254.44	74.26	1543.83	8719.77	6848.49	5185.76
16.3	14.3	10	0.70	0.50	0.93	40.00	54.72	280.8	74.70	1646.28	8766.54	6885.22	5202.91	74.70	1567.30	8766.54	6885.22	5134.23
16.4	14.4	11	0.70	0.50	0.79	35.40	34.65	282.7	63.87	1666.34	5585.03	4386.47	5147.88	63.87	1587.37	5585.03	4386.47	5079.20
16.5	14.5	11	0.70	0.50	0.79	35.40	34.63	284.7	64.25	1686.53	5614.31	4409.47	5263.14	64.25	1607.55	5614.31	4409.47	5194.46
16.6	14.6	11	0.70	0.50	0.79	35.40	34.61	286.7	64.63	1706.83	5643.53	4432.42	5378.88	64.63	1627.85	5643.53	4432.42	5310.20
16.7	14.7	12	0.70	0.50	0.86	37.70	43.75	288.6	70.54	1728.99	7176.21	5636.18	5496.60	70.54	1650.01	7176.21	5636.18	5427.93
16.8	14.8	12	0.70	0.50	0.86	37.70	43.72	290.6	70.95	1751.28	7213.17	5665.21	5535.29	70.95	1672.31	7213.17	5665.21	5466.62
16.9	14.9	12	0.70	0.50	0.86	37.70	43.69	292.6	71.36	1773.70	7250.05	5694.18	5574.05	71.36	1694.73	7250.05	5694.18	5505.37
17.0	15.0	12	0.70	0.50	0.86	37.70	43.66	294.5	71.77	1796.25	7286.85	5723.08	5612.86	71.77	1717.27	7286.85	5723.08	5544.19

1.1.4.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3794	3739

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	1.3	10.70	2.69	821.24	412.80	356.58	10.70	2.69	821.24	412.80	356.58
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	2.5	11.04	5.46	847.95	426.23	367.68	11.04	5.46	847.95	426.23	367.68
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	3.8	11.39	8.33	874.66	439.65	378.86	11.39	8.33	874.66	439.65	378.86
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	5.0	11.74	11.28	901.37	453.08	390.11	11.74	11.28	901.37	453.08	390.11
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	6.3	12.09	14.31	928.08	466.50	401.44	12.09	14.31	928.08	466.50	401.44
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	7.5	12.43	17.44	954.79	479.93	412.85	12.43	17.44	954.79	479.93	412.85
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	8.8	12.78	20.65	981.49	493.35	424.33	12.78	20.65	981.49	493.35	424.33
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	10.1	13.13	23.95	1008.20	506.78	435.89	13.13	23.95	1008.20	506.78	435.89
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	11.3	13.48	27.34	1034.91	520.20	447.52	13.48	27.34	1034.91	520.20	447.52
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	12.6	13.83	30.81	1061.62	533.63	459.23	13.83	30.81	1061.62	533.63	459.23
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	13.8	14.17	34.38	1088.33	547.05	471.02	14.17	34.38	1088.33	547.05	471.02
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	15.1	14.52	38.03	1115.04	560.48	446.44	14.52	38.03	1115.04	560.48	442.04
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	16.3	14.87	41.76	1141.75	573.90	421.10	14.87	41.76	1141.75	573.90	412.35
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	17.6	15.22	45.59	1168.45	587.33	394.99	15.22	45.59	1168.45	587.33	381.92
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	18.8	15.57	49.50	1195.16	600.75	368.12	15.57	49.50	1195.16	600.75	350.77
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	20.1	15.91	53.50	1221.87	614.18	340.48	15.91	53.50	1221.87	614.18	318.90
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	21.4	16.26	57.59	1248.58	627.60	312.07	16.26	57.59	1248.58	627.60	286.30
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	22.6	16.61	61.76	1275.29	641.03	282.90	16.61	61.76	1275.29	641.03	252.98
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	23.9	16.96	66.02	1302.00	654.45	291.32	16.96	66.02	1302.00	654.45	261.39
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	25.1	17.30	70.37	1328.70	667.88	299.75	17.30	70.37	1328.70	667.88	269.83
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	26.4	17.65	74.81	1355.41	681.30	308.21	17.65	74.81	1355.41	681.30	278.28
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	27.6	17.50	79.21	305.66	153.64	316.57	9.95	77.31	175.74	88.34	284.99
4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	28.9	17.50	83.60	307.49	154.56	361.31	10.12	79.85	178.78	89.87	332.52

Breve termine

Lungo termine

Palo

4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	30.2	17.50	88.00	309.32	155.48	406.84	10.30	82.44	181.82	91.39	380.83
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	31.4	17.50	92.40	311.16	156.40	453.15	10.47	85.07	184.86	92.92	429.93
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	32.7	17.50	96.80	312.99	157.33	500.25	10.64	87.75	187.90	94.45	479.80
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	33.9	17.50	101.20	314.82	158.25	548.14	10.81	90.46	190.94	95.98	530.46
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	35.2	17.50	105.59	316.66	159.17	596.80	10.99	93.22	193.98	97.50	581.89
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	36.4	19.75	110.56	1451.54	729.62	603.63	19.75	98.19	1451.54	729.62	586.21
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	37.7	20.09	115.61	1476.57	742.20	572.17	20.09	103.24	1476.57	742.20	548.13
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	39.0	20.43	120.74	1501.59	754.78	540.01	20.43	108.37	1501.59	754.78	509.39
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	40.2	20.77	125.97	1526.62	767.36	507.13	20.77	113.60	1526.62	767.36	469.98
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	41.5	21.11	131.27	1551.65	779.94	473.55	21.11	118.90	1551.65	779.94	429.89
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	42.7	21.45	136.66	1576.67	792.52	439.25	21.45	124.29	1576.67	792.52	389.14
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	44.0	21.80	142.14	1601.70	805.10	404.24	21.80	129.77	1601.70	805.10	347.71
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	45.2	22.14	147.71	1626.73	817.68	368.52	22.14	135.34	1626.73	817.68	305.62
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	46.5	22.48	153.35	1651.75	830.26	332.09	22.48	140.98	1651.75	830.26	262.86
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	47.8	22.82	159.09	1676.78	842.84	294.95	22.82	146.72	1676.78	842.84	219.42
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	49.0	21.70	164.54	427.84	215.06	256.78	13.08	150.01	231.05	116.14	173.12
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	50.3	21.70	170.00	429.67	215.98	260.95	13.26	153.34	234.09	117.67	175.89
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	51.5	21.70	175.45	431.51	216.90	265.12	13.43	156.71	237.13	119.19	178.70
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	52.8	21.70	180.90	433.34	217.82	269.29	13.60	160.13	240.17	120.72	181.55
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	54.0	21.70	186.36	435.17	218.74	273.46	13.77	163.59	243.21	122.25	184.43
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	55.3	21.70	191.81	437.00	219.66	277.63	13.94	167.10	246.25	123.78	187.36
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	56.5	21.70	197.27	438.84	220.58	281.79	14.12	170.65	249.29	125.30	190.32
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	57.8	21.70	202.72	440.67	221.50	285.96	14.29	174.24	252.32	126.83	193.31
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	59.1	21.70	208.17	442.50	222.43	290.13	14.46	177.87	255.36	128.36	196.35
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	60.3	21.70	213.63	444.34	223.35	294.30	14.63	181.55	258.40	129.89	199.42
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	61.6	21.70	219.08	446.17	224.27	382.35	14.81	185.27	261.44	131.42	292.26
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	62.8	21.70	224.53	448.00	225.19	471.50	14.98	189.04	264.48	132.94	386.19
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	64.1	21.70	229.99	449.84	226.11	561.74	15.15	192.84	267.52	134.47	481.22
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	65.3	21.70	235.44	451.67	227.03	653.09	15.32	196.69	270.56	136.00	577.34
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	66.6	21.70	240.90	453.50	227.95	745.53	15.49	200.59	273.60	137.53	674.55
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	67.9	21.70	246.35	455.33	228.88	839.07	15.67	204.53	276.64	139.05	772.86
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	69.1	21.70	251.80	457.17	229.80	933.64	15.84	208.51	279.68	140.58	872.21
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	70.4	21.70	257.26	459.00	230.72	1029.26	16.01	212.53	282.72	142.11	972.58
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	71.6	21.70	262.71	460.83	231.64	1125.90	16.18	216.60	285.76	143.64	1073.99
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	72.9	21.70	268.16	462.67	232.56	1131.62	16.35	220.71	288.80	145.16	1077.51
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	74.1	32.46	276.32	2942.62	1479.12	1139.70	32.46	228.87	2942.62	1479.12	1084.54
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	75.4	32.84	284.58	2976.90	1496.35	1063.97	32.84	237.12	2976.90	1496.35	1001.92
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	76.7	33.22	292.93	3011.17	1513.58	987.23	33.22	245.47	3011.17	1513.58	918.32
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	77.9	33.60	301.37	3045.44	1530.80	909.48	33.60	253.91	3045.44	1530.80	833.73
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	79.2	33.97	309.91	3079.71	1548.03	830.71	33.97	262.45	3079.71	1548.03	748.15
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	80.4	34.35	318.54	3113.98	1565.26	750.92	34.35	271.08	3113.98	1565.26	661.59
8.5	6.5	7	0.70	0.50	0.79	35.40	35.90	81.7	34.73	327.27	3146.43	1581.57	670.12	34.73	279.81	3146.43	1581.57	574.04
8.6	6.6	7	0.70	0.50	0.79	35.40	35.88	82.9	35.11	336.09	3178.82	1597.85	588.36	35.11	288.63	3178.82	1597.85	485.57
8.7	6.7	7	0.70	0.50	0.79	35.40	35.86	84.2	35.49	345.01	3211.16	1614.11	505.66	35.49	297.55	3211.16	1614.11	396.18
8.8	6.8	8	0.58	0.50	0.40	19.00	3.56	85.5	23.20	350.84	526.91	264.86	419.23	18.26	302.14	321.36	161.53	302.01
8.9	6.9	8	0.58	0.50	0.40	19.00	3.55	86.7	23.20	356.67	528.75	265.78	423.73	18.43	306.78	324.11	162.91	305.79
9.0	7.0	8	0.58	0.50	0.40	19.00	3.55	88.0	23.20	362.50	530.58	266.70	428.22	18.61	311.45	326.85	164.29	309.61

9.1	7.1	8	0.58	0.50	0.40	19.00	3.55	89.2	23.20	368.33	532.41	267.62	432.72	18.78	316.17	329.58	165.67	313.46
9.2	7.2	8	0.58	0.50	0.40	19.00	3.54	90.5	23.20	374.17	534.25	268.54	437.22	18.95	320.93	332.31	167.04	317.35
9.3	7.3	8	0.58	0.50	0.40	19.00	3.54	91.7	23.20	380.00	536.08	269.46	441.71	19.12	325.74	335.03	168.40	321.28
9.4	7.4	8	0.58	0.50	0.40	19.00	3.54	93.0	23.20	385.83	537.91	270.38	446.21	19.29	330.59	337.74	169.77	325.23
9.5	7.5	8	0.58	0.50	0.40	19.00	3.53	94.2	23.20	391.66	539.75	271.31	450.70	19.47	335.48	340.45	171.13	329.23
9.6	7.6	8	0.58	0.50	0.40	19.00	3.53	95.5	23.20	397.49	541.58	272.23	535.10	19.64	340.42	343.15	172.49	419.59
9.7	7.7	8	0.58	0.50	0.40	19.00	3.53	96.8	23.20	403.32	543.41	273.15	620.25	19.81	345.40	345.84	173.84	510.71
9.8	7.8	8	0.58	0.50	0.40	19.00	3.52	98.0	23.20	409.15	545.24	274.07	706.16	19.98	350.42	348.53	175.19	602.61
9.9	7.9	8	0.58	0.50	0.40	19.00	3.52	99.3	23.20	414.98	547.08	274.99	792.82	20.15	355.48	351.21	176.54	695.26
10.0	8.0	8	0.58	0.50	0.40	19.00	3.52	100.5	23.20	420.81	548.91	275.91	880.24	20.33	360.59	353.88	177.88	788.68
10.1	8.1	8	0.58	0.50	0.40	19.00	3.51	101.8	23.20	426.64	550.74	276.83	968.40	20.50	365.74	356.55	179.22	882.86
10.2	8.2	8	0.58	0.50	0.40	19.00	3.51	103.0	23.20	432.47	552.58	277.75	1057.32	20.67	370.94	359.21	180.56	977.79
10.3	8.3	8	0.58	0.50	0.40	19.00	3.51	104.3	23.20	438.30	554.41	278.68	1146.98	20.84	376.18	361.86	181.89	1073.48
10.4	8.4	8	0.58	0.50	0.40	19.00	3.50	105.6	23.20	444.13	556.24	279.60	1237.39	21.02	381.46	364.50	183.22	1169.93
10.5	8.5	8	0.58	0.50	0.40	19.00	3.50	106.8	23.20	449.97	558.08	280.52	1328.54	21.19	386.78	367.14	184.55	1267.13
10.6	8.6	9	0.70	0.50	0.73	33.10	27.59	108.1	38.59	459.66	2920.35	1467.93	1423.79	38.59	396.48	2920.35	1467.93	1368.85
10.7	8.7	9	0.70	0.50	0.73	33.10	27.57	109.3	38.94	469.45	2944.57	1480.10	1439.97	38.94	406.27	2944.57	1480.10	1385.02
10.8	8.8	9	0.70	0.50	0.73	33.10	27.55	110.6	39.28	479.32	2968.74	1492.25	1456.20	39.28	416.14	2968.74	1492.25	1401.25
10.9	8.9	9	0.70	0.50	0.73	33.10	27.53	111.8	39.63	489.28	2992.86	1504.37	1584.61	39.63	426.10	2992.86	1504.37	1529.66
11.0	9.0	9	0.70	0.50	0.73	33.10	27.51	113.1	39.98	499.33	3016.92	1516.47	1713.91	39.98	436.15	3016.92	1516.47	1658.97
11.1	9.1	9	0.70	0.50	0.73	33.10	27.49	114.4	40.33	509.47	3040.94	1528.54	1844.10	40.33	446.28	3040.94	1528.54	1789.16
11.2	9.2	9	0.70	0.50	0.73	33.10	27.47	115.6	40.67	519.69	3064.90	1540.59	1975.18	40.67	456.51	3064.90	1540.59	1920.23
11.3	9.3	9	0.70	0.50	0.73	33.10	27.45	116.9	41.02	530.00	3088.81	1552.60	2107.14	41.02	466.82	3088.81	1552.60	2052.20
11.4	9.4	9	0.70	0.50	0.73	33.10	27.43	118.1	41.37	540.40	3112.66	1564.59	2239.98	41.37	477.21	3112.66	1564.59	2185.04
11.5	9.5	9	0.70	0.50	0.73	33.10	27.41	119.4	41.72	550.88	3136.46	1576.56	2373.71	41.72	487.70	3136.46	1576.56	2318.77
11.6	9.6	9	0.70	0.50	0.73	33.10	27.39	120.6	42.07	561.45	3160.21	1588.50	2508.32	42.07	498.27	3160.21	1588.50	2453.38
11.7	9.7	9	0.70	0.50	0.73	33.10	27.37	121.9	42.41	572.11	3183.90	1600.40	2643.80	42.41	508.93	3183.90	1600.40	2588.86
11.8	9.8	9	0.70	0.50	0.73	33.10	27.35	123.2	42.76	582.86	3207.54	1612.29	2780.17	42.76	519.68	3207.54	1612.29	2725.22
11.9	9.9	10	0.70	0.50	0.93	40.00	55.34	124.4	55.13	596.72	6543.64	3289.19	2920.03	55.13	533.53	6543.64	3289.19	2865.09
12.0	10.0	10	0.70	0.50	0.93	40.00	55.31	125.7	55.57	610.68	6591.83	3313.41	2948.66	55.57	547.50	6591.83	3313.41	2893.71
12.1	10.1	10	0.70	0.50	0.93	40.00	55.27	126.9	56.02	624.76	6639.91	3337.58	2977.34	56.02	561.58	6639.91	3337.58	2922.40
12.2	10.2	10	0.70	0.50	0.93	40.00	55.23	128.2	56.46	638.95	6687.89	3361.70	3006.08	56.46	575.77	6687.89	3361.70	2951.14
12.3	10.3	10	0.70	0.50	0.93	40.00	55.19	129.4	56.91	653.25	6735.76	3385.76	3034.88	56.91	590.07	6735.76	3385.76	2979.94
12.4	10.4	10	0.70	0.50	0.93	40.00	55.15	130.7	57.35	667.67	6783.52	3409.77	3063.73	57.35	604.49	6783.52	3409.77	3008.79
12.5	10.5	10	0.70	0.50	0.93	40.00	55.11	131.9	57.80	682.20	6831.17	3433.72	3092.64	57.80	619.01	6831.17	3433.72	3037.70
12.6	10.6	10	0.70	0.50	0.93	40.00	55.07	133.2	58.24	696.83	6878.71	3457.62	3121.60	58.24	633.65	6878.71	3457.62	3066.66
12.7	10.7	10	0.70	0.50	0.93	40.00	55.03	134.5	58.69	711.58	6926.14	3481.46	3150.61	58.69	648.40	6926.14	3481.46	3095.67
12.8	10.8	10	0.70	0.50	0.93	40.00	54.99	135.7	59.13	726.44	6973.46	3505.24	3179.68	59.13	663.26	6973.46	3505.24	3124.74
12.9	10.9	10	0.70	0.50	0.93	40.00	54.95	137.0	59.58	741.42	7020.66	3528.97	3208.81	59.58	678.24	7020.66	3528.97	3153.87
13.0	11.0	10	0.70	0.50	0.93	40.00	54.90	138.2	60.02	756.50	7067.75	3552.64	3237.98	60.02	693.32	7067.75	3552.64	3183.04
13.1	11.1	10	0.70	0.50	0.93	40.00	54.86	139.5	60.47	771.70	7114.73	3576.25	3267.21	60.47	708.52	7114.73	3576.25	3212.27
13.2	11.2	10	0.70	0.50	0.93	40.00	54.82	140.7	60.91	787.01	7161.59	3599.81	3296.49	60.91	723.83	7161.59	3599.81	3241.55
13.3	11.3	10	0.70	0.50	0.93	40.00	54.78	142.0	61.36	802.43	7208.33	3623.30	3325.83	61.36	739.25	7208.33	3623.30	3270.89
13.4	11.4	10	0.70	0.50	0.93	40.00	54.74	143.3	61.80	817.96	7254.96	3646.74	3355.21	61.80	754.78	7254.96	3646.74	3300.27
13.5	11.5	10	0.70	0.50	0.93	40.00	54.69	144.5	62.25	833.60	7301.47	3670.12	3384.65	62.25	770.42	7301.47	3670.12	3329.71
13.6	11.6	10	0.70	0.50	0.93	40.00	54.65	145.8	62.69	849.36	7347.86	3693.44	3414.14	62.69	786.18	7347.86	3693.44	3359.20
13.7	11.7	10	0.70	0.50	0.93	40.00	54.61	147.0	63.14	865.23	7394.13	3716.70	3443.68	63.14	802.05	7394.13	3716.70	3388.74

13.8	11.8	10	0.70	0.50	0.93	40.00	54.56	148.3	63.58	881.21	7440.28	3739.89	3473.27	63.58	818.02	7440.28	3739.89	3418.32
13.9	11.9	10	0.70	0.50	0.93	40.00	54.52	149.5	64.02	897.30	7486.31	3763.03	3503.00	64.02	834.12	7486.31	3763.03	3448.06
14.0	12.0	10	0.70	0.50	0.93	40.00	54.47	150.8	64.47	913.50	7532.21	3786.10	3532.87	64.47	850.32	7532.21	3786.10	3477.93
14.1	12.1	10	0.70	0.50	0.93	40.00	54.43	152.1	64.91	929.82	7577.99	3809.11	3562.89	64.91	866.63	7577.99	3809.11	3507.95
14.2	12.2	10	0.70	0.50	0.93	40.00	54.39	153.3	65.36	946.24	7623.65	3832.06	3593.06	65.36	883.06	7623.65	3832.06	3538.12
14.3	12.3	10	0.70	0.50	0.93	40.00	54.34	154.6	65.80	962.78	7669.18	3854.95	3623.38	65.80	899.60	7669.18	3854.95	3568.44
14.4	12.4	10	0.70	0.50	0.93	40.00	54.30	155.8	66.25	979.43	7714.58	3877.77	3653.85	66.25	916.25	7714.58	3877.77	3598.91
14.5	12.5	10	0.70	0.50	0.93	40.00	54.25	157.1	66.69	996.19	7759.86	3900.53	3684.48	66.69	933.01	7759.86	3900.53	3629.53
14.6	12.6	10	0.70	0.50	0.93	40.00	54.20	158.3	67.14	1013.07	7805.01	3923.22	3715.26	67.14	949.88	7805.01	3923.22	3660.32
14.7	12.7	10	0.70	0.50	0.93	40.00	54.16	159.6	67.58	1030.05	7850.02	3945.85	3746.21	67.58	966.87	7850.02	3945.85	3691.27
14.8	12.8	10	0.70	0.50	0.93	40.00	54.11	160.8	68.03	1047.15	7894.91	3968.42	3777.32	68.03	983.97	7894.91	3968.42	3722.38
14.9	12.9	10	0.70	0.50	0.93	40.00	54.08	162.1	68.47	1064.36	7942.36	3992.26	3808.59	68.47	1001.18	7942.36	3992.26	3753.65
15.0	13.0	10	0.70	0.50	0.93	40.00	54.05	163.4	68.92	1081.68	7989.75	4016.09	3839.95	68.92	1018.50	7989.75	4016.09	3785.01
15.1	13.1	10	0.70	0.50	0.93	40.00	54.03	164.6	69.36	1099.11	8037.09	4039.88	3871.38	69.36	1035.93	8037.09	4039.88	3816.44
15.2	13.2	10	0.70	0.50	0.93	40.00	54.00	165.9	69.81	1116.66	8084.38	4063.65	3902.89	69.81	1053.47	8084.38	4063.65	3847.95
15.3	13.3	10	0.70	0.50	0.93	40.00	53.97	167.1	70.25	1134.31	8131.61	4087.40	3934.48	70.25	1071.13	8131.61	4087.40	3879.54
15.4	13.4	10	0.70	0.50	0.93	40.00	53.94	168.4	70.70	1152.08	8178.80	4111.11	3858.85	70.70	1088.90	8178.80	4111.11	3803.91
15.5	13.5	10	0.70	0.50	0.93	40.00	53.91	169.6	71.14	1169.96	8225.93	4134.80	3782.73	71.14	1106.78	8225.93	4134.80	3727.79
15.6	13.6	10	0.70	0.50	0.93	40.00	53.88	170.9	71.59	1187.95	8273.01	4158.47	3706.12	71.59	1124.77	8273.01	4158.47	3651.17
15.7	13.7	10	0.70	0.50	0.93	40.00	53.86	172.2	72.03	1206.06	8320.04	4182.11	3678.97	72.03	1142.87	8320.04	4182.11	3624.03
15.8	13.8	10	0.70	0.50	0.93	40.00	53.83	173.4	72.48	1224.27	8367.02	4205.72	3651.59	72.48	1161.09	8367.02	4205.72	3596.65
15.9	13.9	10	0.70	0.50	0.93	40.00	53.80	174.7	72.92	1242.60	8413.94	4229.31	3623.98	72.92	1179.42	8413.94	4229.31	3569.04
16.0	14.0	10	0.70	0.50	0.93	40.00	53.77	175.9	73.37	1261.04	8460.82	4252.87	3596.14	73.37	1197.85	8460.82	4252.87	3541.20
16.1	14.1	10	0.70	0.50	0.93	40.00	53.74	177.2	73.81	1279.59	8507.64	4276.41	3568.07	73.81	1216.40	8507.64	4276.41	3513.13
16.2	14.2	10	0.70	0.50	0.93	40.00	53.71	178.4	74.26	1298.25	8554.41	4299.92	3539.77	74.26	1235.07	8554.41	4299.92	3484.83
16.3	14.3	10	0.70	0.50	0.93	40.00	53.69	179.7	74.70	1317.02	8601.13	4323.40	3511.24	74.70	1253.84	8601.13	4323.40	3456.30
16.4	14.4	11	0.70	0.50	0.79	35.40	33.99	181.0	63.87	1333.08	5478.10	2753.59	3480.02	63.87	1269.89	5478.10	2753.59	3425.08
16.5	14.5	11	0.70	0.50	0.79	35.40	33.97	182.2	64.25	1349.22	5507.73	2768.49	3555.84	64.25	1286.04	5507.73	2768.49	3500.90
16.6	14.6	11	0.70	0.50	0.79	35.40	33.96	183.5	64.63	1365.46	5537.33	2783.37	3631.99	64.63	1302.28	5537.33	2783.37	3577.05
16.7	14.7	12	0.70	0.50	0.86	37.70	42.94	184.7	70.54	1383.19	7043.12	3540.26	3709.68	70.54	1320.01	7043.12	3540.26	3654.74
16.8	14.8	12	0.70	0.50	0.86	37.70	42.92	186.0	70.95	1401.03	7080.42	3559.01	3737.75	70.95	1337.84	7080.42	3559.01	3682.81
16.9	14.9	12	0.70	0.50	0.86	37.70	42.89	187.2	71.36	1418.96	7117.68	3577.74	3765.89	71.36	1355.78	7117.68	3577.74	3710.95
17.0	15.0	12	0.70	0.50	0.86	37.70	42.87	188.5	71.77	1437.00	7154.90	3596.45	3794.10	71.77	1373.82	7154.90	3596.45	3739.16

1.1.4.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.5**	**19.35**			0.70	0.50	0.00
2	**1.5**	**2.0**	**18.33**	**22**	**16**	0.70	0.50	0.40
3	**2.0**	**4.1**	**19.35**			0.70	0.50	0.00
4	**4.1**	**4.8**	**18.33**	**22**	**25**	0.70	0.50	0.40
5	**4.8**	**5.8**	**19.35**			0.70	0.50	0.00
6	**5.8**	**7.8**	**18.33**	**22**	**35**	0.62	0.50	0.40
7	**7.8**	**8.7**	**19.35**			0.70	0.50	0.00
8	**8.7**	**10.5**	**18.33**	**22**	**40**	0.58	0.50	0.40
9	**10.5**	**11.8**	**19.35**			0.70	0.50	0.00
10	**11.8**	**16.3**	**19.35**	**43**		0.70	0.50	0.93
11	**16.3**	**16.6**	**19.35**			0.70	0.50	0.00
12	**16.6**	**18.7**	**19.35**	**41**		0.70	0.50	0.86
13	**18.7**	**18.9**	**19.35**			0.70	0.50	0.00
14	**18.9**	**20.4**	**19.35**	**41**		0.70	0.50	0.86
15	**20.4**	**21.0**	**19.35**			0.70	0.50	0.00
16	**21.0**	**21.3**	**19.35**	**41**		0.70	0.50	0.86
17	**21.3**	**24.0**	**19.35**			0.70	0.50	0.00

1.1.4.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7308	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	-2.83
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	-5.65
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	-8.48
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	-14.14
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	-16.96
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	-19.79
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	-22.62
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	-25.45
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	-28.27
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	-31.10
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	-10.65
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	9.94
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	30.67
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	51.54
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	72.55
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	93.70
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	114.99
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	112.16
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	109.33
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	106.51
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	62.2	17.50	6.60	305.66	345.69	109.42

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	65.0	17.50	13.19	307.49	347.76	89.05
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	67.9	17.50	19.79	309.32	349.84	68.54
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	70.7	17.50	26.39	311.16	351.91	47.89
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	73.5	17.50	32.99	312.99	353.98	27.10
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	76.3	17.50	39.58	314.82	356.06	6.17
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	79.2	17.50	46.18	316.66	358.13	-14.89
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	82.0	0.00	46.18	0.00	0.00	-9.25
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	84.8	0.00	46.18	0.00	0.00	20.64
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	87.7	0.00	46.18	0.00	0.00	50.68
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	90.5	0.00	46.18	0.00	0.00	80.85
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	93.3	0.00	46.18	0.00	0.00	111.17
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	96.1	0.00	46.18	0.00	0.00	141.62
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	99.0	0.00	46.18	0.00	0.00	172.22
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	101.8	0.00	46.18	0.00	0.00	202.95
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	104.6	0.00	46.18	0.00	0.00	233.83
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	107.4	0.00	46.18	0.00	0.00	264.84
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	110.3	21.70	54.36	427.84	483.87	303.11
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	113.1	21.70	62.54	429.67	485.95	308.93
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	115.9	21.70	70.72	431.51	488.02	314.75
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	118.8	21.70	78.90	433.34	490.09	320.57
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	121.6	21.70	87.08	435.17	492.17	326.39
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	124.4	21.70	95.27	437.00	494.24	332.21
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	127.2	21.70	103.45	438.84	496.31	338.04
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	130.1	21.70	111.63	440.67	498.39	343.86
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	132.9	21.70	119.81	442.50	500.46	349.68
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	135.7	21.70	127.99	444.34	502.53	355.50
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	138.5	21.70	136.17	446.17	504.61	325.95
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	141.4	21.70	144.35	448.00	506.68	296.25
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	144.2	21.70	152.53	449.84	508.75	266.42
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	147.0	21.70	160.71	451.67	510.82	236.45
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	149.9	21.70	168.89	453.50	512.90	206.33
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	152.7	21.70	177.07	455.33	514.97	176.08
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	155.5	21.70	185.25	457.17	517.04	145.69
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	158.3	21.70	193.43	459.00	519.12	115.16
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	161.2	21.70	201.61	460.83	521.19	84.49
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	164.0	21.70	209.80	462.67	523.26	93.81
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	166.8	0.00	209.80	0.00	0.00	96.01
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	169.6	0.00	209.80	0.00	0.00	133.59
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	172.5	0.00	209.80	0.00	0.00	171.31
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	175.3	0.00	209.80	0.00	0.00	209.17
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	178.1	0.00	209.80	0.00	0.00	247.17
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	181.0	0.00	209.80	0.00	0.00	285.31
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	183.8	0.00	209.80	0.00	0.00	323.59
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	186.6	0.00	209.80	0.00	0.00	362.01
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	189.4	0.00	209.80	0.00	0.00	400.57
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	192.3	23.20	218.54	526.91	595.93	446.88
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	195.1	23.20	227.29	528.75	598.00	453.19

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	197.9	23.20	236.03	530.58	600.07	459.50
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	200.7	23.20	244.78	532.41	602.14	465.82
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	203.6	23.20	253.53	534.25	604.22	472.13
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	206.4	23.20	262.27	536.08	606.29	478.44
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	209.2	23.20	271.02	537.91	608.36	484.76
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	212.1	23.20	279.77	539.75	610.44	491.07
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	214.9	23.20	288.51	541.58	612.51	454.74
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	217.7	23.20	297.26	543.41	614.58	418.27
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	220.5	23.20	306.00	545.24	616.66	381.66
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	223.4	23.20	314.75	547.08	618.73	344.92
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	226.2	23.20	323.50	548.91	620.80	308.03
10.1	8.1	8	0.58	0.50	0.40	19.00	3.57	229.0	23.20	332.24	550.74	622.88	271.00
10.2	8.2	8	0.58	0.50	0.40	19.00	3.57	231.8	23.20	340.99	552.58	624.95	233.84
10.3	8.3	8	0.58	0.50	0.40	19.00	3.57	234.7	23.20	349.73	554.41	627.02	196.53
10.4	8.4	8	0.58	0.50	0.40	19.00	3.57	237.5	23.20	358.48	556.24	629.09	159.08
10.5	8.5	8	0.58	0.50	0.40	19.00	3.57	240.3	23.20	367.23	558.08	631.17	121.50
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	243.2	0.00	367.23	0.00	0.00	76.17
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	246.0	0.00	367.23	0.00	0.00	73.34
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	248.8	0.00	367.23	0.00	0.00	70.51
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	251.6	0.00	367.23	0.00	0.00	576.23
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	254.5	0.00	367.23	0.00	0.00	1085.87
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	257.3	0.00	367.23	0.00	0.00	1599.42
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	260.1	0.00	367.23	0.00	0.00	2116.89
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	263.0	0.00	367.23	0.00	0.00	2638.26
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	265.8	0.00	367.23	0.00	0.00	3163.54
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	268.6	0.00	367.23	0.00	0.00	3692.72
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	271.4	0.00	367.23	0.00	0.00	4225.80
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	274.3	0.00	367.23	0.00	0.00	4762.76
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	277.1	0.00	367.23	0.00	0.00	5303.62
11.9	9.9	10	0.70	0.50	0.93	40.00	56.47	279.9	55.13	388.01	6677.32	7551.88	5866.44
12.0	10.0	10	0.70	0.50	0.93	40.00	56.45	282.7	55.57	408.96	6728.80	7610.09	5924.73
12.1	10.1	10	0.70	0.50	0.93	40.00	56.43	285.6	56.02	430.08	6780.23	7668.25	5983.13
12.2	10.2	10	0.70	0.50	0.93	40.00	56.41	288.4	56.46	451.36	6831.60	7726.36	6041.63
12.3	10.3	10	0.70	0.50	0.93	40.00	56.39	291.2	56.91	472.82	6882.92	7784.40	6100.23
12.4	10.4	10	0.70	0.50	0.93	40.00	56.37	294.1	57.35	494.44	6934.19	7842.38	6158.92
12.5	10.5	10	0.70	0.50	0.93	40.00	56.35	296.9	57.80	516.23	6985.40	7900.31	6217.72
12.6	10.6	10	0.70	0.50	0.93	40.00	56.33	299.7	58.24	538.19	7036.57	7958.17	6276.62
12.7	10.7	10	0.70	0.50	0.93	40.00	56.31	302.5	58.69	560.31	7087.68	8015.97	6335.62
12.8	10.8	10	0.70	0.50	0.93	40.00	56.29	305.4	59.13	582.60	7138.73	8073.72	6394.72
12.9	10.9	10	0.70	0.50	0.93	40.00	56.27	308.2	59.58	605.06	7189.73	8131.40	6453.92
13.0	11.0	10	0.70	0.50	0.93	40.00	56.25	311.0	60.02	627.69	7240.68	8189.02	6513.21
13.1	11.1	10	0.70	0.50	0.93	40.00	56.23	313.8	60.47	650.48	7291.57	8246.58	6572.61
13.2	11.2	10	0.70	0.50	0.93	40.00	56.20	316.7	60.91	673.45	7342.41	8304.07	6632.10
13.3	11.3	10	0.70	0.50	0.93	40.00	56.18	319.5	61.36	696.58	7393.19	8361.50	6691.69
13.4	11.4	10	0.70	0.50	0.93	40.00	56.16	322.3	61.80	719.88	7443.92	8418.87	6751.38
13.5	11.5	10	0.70	0.50	0.93	40.00	56.14	325.2	62.25	743.34	7494.59	8476.18	6811.17
13.6	11.6	10	0.70	0.50	0.93	40.00	56.12	328.0	62.69	766.98	7545.20	8533.42	6871.05

13.7	11.7	10	0.70	0.50	0.93	40.00	56.10	330.8	63.14	790.78	7595.76	8590.60	6931.03
13.8	11.8	10	0.70	0.50	0.93	40.00	56.07	333.6	63.58	814.75	7646.26	8647.71	6991.10
13.9	11.9	10	0.70	0.50	0.93	40.00	56.05	336.5	64.02	838.88	7696.70	8704.76	7051.27
14.0	12.0	10	0.70	0.50	0.93	40.00	56.03	339.3	64.47	863.19	7747.08	8761.74	7111.54
14.1	12.1	10	0.70	0.50	0.93	40.00	56.01	342.1	64.91	887.66	7797.41	8818.66	7171.91
14.2	12.2	10	0.70	0.50	0.93	40.00	55.98	344.9	65.36	912.30	7847.67	8875.51	7232.36
14.3	12.3	10	0.70	0.50	0.93	40.00	55.96	347.8	65.80	937.11	7897.88	8932.29	7292.92
14.4	12.4	10	0.70	0.50	0.93	40.00	55.94	350.6	66.25	962.08	7948.03	8989.01	7353.56
14.5	12.5	10	0.70	0.50	0.93	40.00	55.92	353.4	66.69	987.23	7998.12	9045.66	7414.31
14.6	12.6	10	0.70	0.50	0.93	40.00	55.89	356.3	67.14	1012.54	8048.15	9102.24	7475.14
14.7	12.7	10	0.70	0.50	0.93	40.00	55.87	359.1	67.58	1038.01	8098.12	9158.75	7536.07
14.8	12.8	10	0.70	0.50	0.93	40.00	55.85	361.9	68.03	1063.66	8148.02	9215.20	7597.10
14.9	12.9	10	0.70	0.50	0.93	40.00	55.82	364.7	68.47	1089.47	8197.87	9271.57	7658.21
15.0	13.0	10	0.70	0.50	0.93	40.00	55.80	367.6	68.92	1115.45	8247.65	9327.88	7719.42
15.1	13.1	10	0.70	0.50	0.93	40.00	55.78	370.4	69.36	1141.60	8297.38	9384.11	7780.72
15.2	13.2	10	0.70	0.50	0.93	40.00	55.75	373.2	69.81	1167.92	8347.04	9440.28	7842.12
15.3	13.3	10	0.70	0.50	0.93	40.00	55.73	376.0	70.25	1194.40	8396.64	9496.37	7903.60
15.4	13.4	10	0.70	0.50	0.93	40.00	55.70	378.9	70.70	1221.06	8446.17	9552.40	7284.47
15.5	13.5	10	0.70	0.50	0.93	40.00	55.68	381.7	71.14	1247.88	8495.64	9608.35	6661.70
15.6	13.6	10	0.70	0.50	0.93	40.00	55.66	384.5	71.59	1274.86	8545.05	9664.23	6035.31
15.7	13.7	10	0.70	0.50	0.93	40.00	55.63	387.4	72.03	1302.02	8594.40	9720.03	5960.16
15.8	13.8	10	0.70	0.50	0.93	40.00	55.61	390.2	72.48	1329.34	8643.68	9775.77	5884.36
15.9	13.9	10	0.70	0.50	0.93	40.00	55.58	393.0	72.92	1356.83	8692.89	9831.43	5807.90
16.0	14.0	10	0.70	0.50	0.93	40.00	55.56	395.8	73.37	1384.49	8742.04	9887.02	5730.79
16.1	14.1	10	0.70	0.50	0.93	40.00	55.53	398.7	73.81	1412.32	8791.13	9942.53	5653.03
16.2	14.2	10	0.70	0.50	0.93	40.00	55.51	401.5	74.26	1440.31	8840.15	9997.97	5574.62
16.3	14.3	10	0.70	0.50	0.93	40.00	55.48	404.3	74.70	1468.47	8889.10	10053.34	5495.56
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1468.47	0.00	0.00	5391.22
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1468.47	0.00	0.00	5966.80
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1468.47	0.00	0.00	6545.31
16.7	14.7	12	0.70	0.50	0.86	37.70	44.42	415.6	70.54	1495.07	7285.35	8239.54	7149.86
16.8	14.8	12	0.70	0.50	0.86	37.70	44.39	418.5	70.95	1521.81	7324.22	8283.49	7202.61
16.9	14.9	12	0.70	0.50	0.86	37.70	44.37	421.3	71.36	1548.72	7363.02	8327.38	7255.45
17.0	15.0	12	0.70	0.50	0.86	37.70	44.35	424.1	71.77	1575.78	7401.77	8371.21	7308.37

1.1.4.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5193	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	-1.96
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	-3.93
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	-5.89
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	-7.85
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	-9.82
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	-11.78
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	-13.74
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	-15.71
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	-17.67
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	-19.63
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	-21.60
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	-7.40
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	6.90
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	21.30
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	35.79
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	50.38
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	65.07
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	79.85
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	77.89
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	75.93
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	73.96
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	43.2	17.50	5.50	305.66	240.06	76.78

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	45.2	17.50	11.00	307.49	241.50	63.43
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	47.1	17.50	16.49	309.32	242.94	49.99
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	49.1	17.50	21.99	311.16	244.38	36.44
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	51.1	17.50	27.49	312.99	245.82	22.80
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	53.0	17.50	32.99	314.82	247.26	9.07
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	55.0	17.50	38.48	316.66	248.70	-4.77
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	56.9	0.00	38.48	0.00	0.00	-0.85
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	58.9	0.00	38.48	0.00	0.00	19.91
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	60.9	0.00	38.48	0.00	0.00	40.77
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	62.8	0.00	38.48	0.00	0.00	61.73
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	64.8	0.00	38.48	0.00	0.00	82.78
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	66.8	0.00	38.48	0.00	0.00	103.93
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	68.7	0.00	38.48	0.00	0.00	125.17
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	70.7	0.00	38.48	0.00	0.00	146.52
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	72.6	0.00	38.48	0.00	0.00	167.96
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	74.6	0.00	38.48	0.00	0.00	189.49
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	76.6	21.70	45.30	427.84	336.02	217.06
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	78.5	21.70	52.12	429.67	337.46	222.09
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	80.5	21.70	58.94	431.51	338.90	227.12
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	82.5	21.70	65.75	433.34	340.34	232.15
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	84.4	21.70	72.57	435.17	341.78	237.18
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	86.4	21.70	79.39	437.00	343.22	242.21
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	88.4	21.70	86.21	438.84	344.66	247.24
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	90.3	21.70	93.02	440.67	346.10	252.27
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	92.3	21.70	99.84	442.50	347.54	257.30
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	94.2	21.70	106.66	444.34	348.98	262.33
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	96.2	21.70	113.47	446.17	350.42	242.80
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	98.2	21.70	120.29	448.00	351.86	223.17
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	100.1	21.70	127.11	449.84	353.30	203.44
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	102.1	21.70	133.93	451.67	354.74	183.61
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	104.1	21.70	140.74	453.50	356.18	163.69
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	106.0	21.70	147.56	455.33	357.62	143.66
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	108.0	21.70	154.38	457.17	359.06	123.55
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	110.0	21.70	161.20	459.00	360.50	103.33
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	111.9	21.70	168.01	460.83	361.94	83.02
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	113.9	21.70	174.83	462.67	363.38	90.48
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	115.8	0.00	174.83	0.00	0.00	92.01
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	117.8	0.00	174.83	0.00	0.00	118.11
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	119.8	0.00	174.83	0.00	0.00	144.31
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	121.7	0.00	174.83	0.00	0.00	170.60
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	123.7	0.00	174.83	0.00	0.00	196.99
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	125.7	0.00	174.83	0.00	0.00	223.47
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	127.6	0.00	174.83	0.00	0.00	250.06
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	129.6	0.00	174.83	0.00	0.00	276.74
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	131.6	0.00	174.83	0.00	0.00	303.51
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	133.5	23.20	182.12	526.91	413.84	336.72
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	135.5	23.20	189.41	528.75	415.28	342.16

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	137.4	23.20	196.70	530.58	416.72	347.61
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	139.4	23.20	203.98	532.41	418.16	353.05
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	141.4	23.20	211.27	534.25	419.60	358.49
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	143.3	23.20	218.56	536.08	421.04	363.93
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	145.3	23.20	225.85	537.91	422.48	369.37
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	147.3	23.20	233.14	539.75	423.91	374.81
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	149.2	23.20	240.43	541.58	425.35	350.64
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	151.2	23.20	247.71	543.41	426.79	326.37
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	153.2	23.20	255.00	545.24	428.23	302.00
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	155.1	23.20	262.29	547.08	429.67	277.54
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	157.1	23.20	269.58	548.91	431.11	252.98
10.1	8.1	8	0.58	0.50	0.40	19.00	3.56	159.0	23.20	276.87	550.74	432.55	228.32
10.2	8.2	8	0.58	0.50	0.40	19.00	3.56	161.0	23.20	284.16	552.58	433.99	203.57
10.3	8.3	8	0.58	0.50	0.40	19.00	3.56	163.0	23.20	291.45	554.41	435.43	178.72
10.4	8.4	8	0.58	0.50	0.40	19.00	3.56	164.9	23.20	298.73	556.24	436.87	153.77
10.5	8.5	8	0.58	0.50	0.40	19.00	3.56	166.9	23.20	306.02	558.08	438.31	128.73
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	168.9	0.00	306.02	0.00	0.00	97.25
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	170.8	0.00	306.02	0.00	0.00	95.28
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	172.8	0.00	306.02	0.00	0.00	93.32
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	174.8	0.00	306.02	0.00	0.00	441.89
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	176.7	0.00	306.02	0.00	0.00	793.12
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	178.7	0.00	306.02	0.00	0.00	1147.01
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	180.6	0.00	306.02	0.00	0.00	1503.55
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	182.6	0.00	306.02	0.00	0.00	1862.73
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	184.6	0.00	306.02	0.00	0.00	2224.56
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	186.5	0.00	306.02	0.00	0.00	2589.03
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	188.5	0.00	306.02	0.00	0.00	2956.14
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	190.5	0.00	306.02	0.00	0.00	3325.88
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	192.4	0.00	306.02	0.00	0.00	3698.25
11.9	9.9	10	0.70	0.50	0.93	40.00	56.06	194.4	55.13	323.34	6627.77	5205.44	4088.30
12.0	10.0	10	0.70	0.50	0.93	40.00	56.03	196.3	55.57	340.80	6678.05	5244.93	4130.57
12.1	10.1	10	0.70	0.50	0.93	40.00	56.00	198.3	56.02	358.40	6728.27	5284.37	4172.91
12.2	10.2	10	0.70	0.50	0.93	40.00	55.97	200.3	56.46	376.14	6778.41	5323.75	4215.33
12.3	10.3	10	0.70	0.50	0.93	40.00	55.95	202.2	56.91	394.02	6828.48	5363.07	4257.83
12.4	10.4	10	0.70	0.50	0.93	40.00	55.92	204.2	57.35	412.03	6878.48	5402.34	4300.40
12.5	10.5	10	0.70	0.50	0.93	40.00	55.89	206.2	57.80	430.19	6928.40	5441.55	4343.05
12.6	10.6	10	0.70	0.50	0.93	40.00	55.86	208.1	58.24	448.49	6978.25	5480.71	4385.79
12.7	10.7	10	0.70	0.50	0.93	40.00	55.84	210.1	58.69	466.93	7028.03	5519.80	4428.59
12.8	10.8	10	0.70	0.50	0.93	40.00	55.81	212.1	59.13	485.50	7077.74	5558.84	4471.48
12.9	10.9	10	0.70	0.50	0.93	40.00	55.78	214.0	59.58	504.22	7127.37	5597.82	4514.44
13.0	11.0	10	0.70	0.50	0.93	40.00	55.75	216.0	60.02	523.07	7176.92	5636.74	4557.48
13.1	11.1	10	0.70	0.50	0.93	40.00	55.72	217.9	60.47	542.07	7226.40	5675.60	4600.59
13.2	11.2	10	0.70	0.50	0.93	40.00	55.69	219.9	60.91	561.21	7275.80	5714.40	4643.78
13.3	11.3	10	0.70	0.50	0.93	40.00	55.67	221.9	61.36	580.48	7325.13	5753.14	4687.05
13.4	11.4	10	0.70	0.50	0.93	40.00	55.64	223.8	61.80	599.90	7374.38	5791.82	4730.39
13.5	11.5	10	0.70	0.50	0.93	40.00	55.61	225.8	62.25	619.45	7423.55	5830.44	4773.80
13.6	11.6	10	0.70	0.50	0.93	40.00	55.58	227.8	62.69	639.15	7472.64	5869.00	4817.29

13.7	11.7	10	0.70	0.50	0.93	40.00	55.55	229.7	63.14	658.98	7521.65	5907.49	4860.85
13.8	11.8	10	0.70	0.50	0.93	40.00	55.52	231.7	63.58	678.96	7570.59	5945.92	4904.49
13.9	11.9	10	0.70	0.50	0.93	40.00	55.49	233.7	64.02	699.07	7619.44	5984.29	4948.20
14.0	12.0	10	0.70	0.50	0.93	40.00	55.46	235.6	64.47	719.32	7668.21	6022.60	4991.98
14.1	12.1	10	0.70	0.50	0.93	40.00	55.43	237.6	64.91	739.72	7716.91	6060.84	5035.84
14.2	12.2	10	0.70	0.50	0.93	40.00	55.40	239.5	65.36	760.25	7765.52	6099.02	5079.77
14.3	12.3	10	0.70	0.50	0.93	40.00	55.37	241.5	65.80	780.92	7814.05	6137.14	5123.77
14.4	12.4	10	0.70	0.50	0.93	40.00	55.34	243.5	66.25	801.74	7862.49	6175.19	5167.84
14.5	12.5	10	0.70	0.50	0.93	40.00	55.31	245.4	66.69	822.69	7910.86	6213.17	5211.99
14.6	12.6	10	0.70	0.50	0.93	40.00	55.27	247.4	67.14	843.78	7959.13	6251.09	5256.20
14.7	12.7	10	0.70	0.50	0.93	40.00	55.24	249.4	67.58	865.01	8007.33	6288.94	5300.49
14.8	12.8	10	0.70	0.50	0.93	40.00	55.21	251.3	68.03	886.38	8055.44	6326.73	5344.84
14.9	12.9	10	0.70	0.50	0.93	40.00	55.18	253.3	68.47	907.89	8103.46	6364.45	5389.27
15.0	13.0	10	0.70	0.50	0.93	40.00	55.15	255.3	68.92	929.55	8151.40	6402.10	5433.77
15.1	13.1	10	0.70	0.50	0.93	40.00	55.12	257.2	69.36	951.34	8199.26	6439.68	5478.33
15.2	13.2	10	0.70	0.50	0.93	40.00	55.08	259.2	69.81	973.27	8247.02	6477.20	5522.97
15.3	13.3	10	0.70	0.50	0.93	40.00	55.05	261.1	70.25	995.34	8294.70	6514.64	5567.68
15.4	13.4	10	0.70	0.50	0.93	40.00	55.02	263.1	70.70	1017.55	8342.29	6552.02	5146.33
15.5	13.5	10	0.70	0.50	0.93	40.00	54.99	265.1	71.14	1039.90	8389.79	6589.33	4722.59
15.6	13.6	10	0.70	0.50	0.93	40.00	54.95	267.0	71.59	1062.39	8437.20	6626.56	4296.45
15.7	13.7	10	0.70	0.50	0.93	40.00	54.92	269.0	72.03	1085.02	8484.52	6663.73	4247.47
15.8	13.8	10	0.70	0.50	0.93	40.00	54.89	271.0	72.48	1107.78	8531.76	6700.83	4198.07
15.9	13.9	10	0.70	0.50	0.93	40.00	54.85	272.9	72.92	1130.69	8578.90	6737.85	4148.24
16.0	14.0	10	0.70	0.50	0.93	40.00	54.82	274.9	73.37	1153.74	8625.94	6774.80	4097.98
16.1	14.1	10	0.70	0.50	0.93	40.00	54.79	276.9	73.81	1176.93	8672.90	6811.68	4047.30
16.2	14.2	10	0.70	0.50	0.93	40.00	54.75	278.8	74.26	1200.26	8719.77	6848.49	3996.20
16.3	14.3	10	0.70	0.50	0.93	40.00	54.72	280.8	74.70	1223.73	8766.54	6885.22	3944.67
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1223.73	0.00	0.00	3872.19
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1223.73	0.00	0.00	4265.29
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1223.73	0.00	0.00	4660.31
16.7	14.7	12	0.70	0.50	0.86	37.70	43.75	288.6	70.54	1245.89	7176.21	5636.18	5076.51
16.8	14.8	12	0.70	0.50	0.86	37.70	43.72	290.6	70.95	1268.18	7213.17	5665.21	5115.20
16.9	14.9	12	0.70	0.50	0.86	37.70	43.69	292.6	71.36	1290.60	7250.05	5694.18	5153.96
17.0	15.0	12	0.70	0.50	0.86	37.70	43.66	294.5	71.77	1313.15	7286.85	5723.08	5192.77

1.1.4.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3458	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	-1.26
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	-2.51
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	-3.77
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	-5.03
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	-6.28
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	-7.54
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	-8.80
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	-10.05
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	-12.57
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	-13.82
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	-4.73
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	4.42
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	13.63
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	22.91
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	32.25
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	41.64
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	51.11
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	49.85
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	48.59
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	47.34
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	27.6	17.50	4.40	305.66	153.64	49.90

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	28.9	17.50	8.80	307.49	154.56	42.13
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	30.2	17.50	13.19	309.32	155.48	34.29
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	31.4	17.50	17.59	311.16	156.40	26.38
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	32.7	17.50	21.99	312.99	157.33	18.42
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	33.9	17.50	26.39	314.82	158.25	10.39
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	35.2	17.50	30.79	316.66	159.17	2.30
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	36.4	0.00	30.79	0.00	0.00	4.81
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	37.7	0.00	30.79	0.00	0.00	18.10
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	39.0	0.00	30.79	0.00	0.00	31.45
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	40.2	0.00	30.79	0.00	0.00	44.86
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	41.5	0.00	30.79	0.00	0.00	58.33
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	42.7	0.00	30.79	0.00	0.00	71.87
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	44.0	0.00	30.79	0.00	0.00	85.47
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	45.2	0.00	30.79	0.00	0.00	99.12
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	46.5	0.00	30.79	0.00	0.00	112.85
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	47.8	0.00	30.79	0.00	0.00	126.63
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	49.0	21.70	36.24	427.84	215.06	145.22
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	50.3	21.70	41.70	429.67	215.98	149.39
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	51.5	21.70	47.15	431.51	216.90	153.55
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	52.8	21.70	52.60	433.34	217.82	157.72
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	54.0	21.70	58.06	435.17	218.74	161.89
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	55.3	21.70	63.51	437.00	219.66	166.06
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	56.5	21.70	68.96	438.84	220.58	170.23
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	57.8	21.70	74.42	440.67	221.50	174.40
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	59.1	21.70	79.87	442.50	222.43	178.56
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	60.3	21.70	85.33	444.34	223.35	182.73
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	61.6	21.70	90.78	446.17	224.27	171.18
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	62.8	21.70	96.23	448.00	225.19	159.56
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	64.1	21.70	101.69	449.84	226.11	147.88
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	65.3	21.70	107.14	451.67	227.03	136.14
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	66.6	21.70	112.59	453.50	227.95	124.34
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	67.9	21.70	118.05	455.33	228.88	112.48
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	69.1	21.70	123.50	457.17	229.80	100.55
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	70.4	21.70	128.96	459.00	230.72	88.56
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	71.6	21.70	134.41	460.83	231.64	76.51
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	72.9	21.70	139.86	462.67	232.56	82.23
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	74.1	0.00	139.86	0.00	0.00	83.21
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	75.4	0.00	139.86	0.00	0.00	99.91
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	76.7	0.00	139.86	0.00	0.00	116.68
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	77.9	0.00	139.86	0.00	0.00	133.51
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	79.2	0.00	139.86	0.00	0.00	150.40
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	80.4	0.00	139.86	0.00	0.00	167.35
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	81.7	0.00	139.86	0.00	0.00	184.36
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	82.9	0.00	139.86	0.00	0.00	201.43
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	84.2	0.00	139.86	0.00	0.00	218.57
8.8	6.8	8	0.58	0.50	0.40	19.00	3.56	85.5	23.20	145.69	526.91	264.86	240.84
8.9	6.9	8	0.58	0.50	0.40	19.00	3.55	86.7	23.20	151.53	528.75	265.78	245.34

9.0	7.0	8	0.58	0.50	0.40	19.00	3.55	88.0	23.20	157.36	530.58	266.70	249.83
9.1	7.1	8	0.58	0.50	0.40	19.00	3.55	89.2	23.20	163.19	532.41	267.62	254.33
9.2	7.2	8	0.58	0.50	0.40	19.00	3.54	90.5	23.20	169.02	534.25	268.54	258.83
9.3	7.3	8	0.58	0.50	0.40	19.00	3.54	91.7	23.20	174.85	536.08	269.46	263.32
9.4	7.4	8	0.58	0.50	0.40	19.00	3.54	93.0	23.20	180.68	537.91	270.38	267.82
9.5	7.5	8	0.58	0.50	0.40	19.00	3.53	94.2	23.20	186.51	539.75	271.31	272.31
9.6	7.6	8	0.58	0.50	0.40	19.00	3.53	95.5	23.20	192.34	541.58	272.23	257.86
9.7	7.7	8	0.58	0.50	0.40	19.00	3.53	96.8	23.20	198.17	543.41	273.15	243.34
9.8	7.8	8	0.58	0.50	0.40	19.00	3.52	98.0	23.20	204.00	545.24	274.07	228.76
9.9	7.9	8	0.58	0.50	0.40	19.00	3.52	99.3	23.20	209.83	547.08	274.99	214.12
10.0	8.0	8	0.58	0.50	0.40	19.00	3.52	100.5	23.20	215.66	548.91	275.91	199.41
10.1	8.1	8	0.58	0.50	0.40	19.00	3.51	101.8	23.20	221.49	550.74	276.83	184.65
10.2	8.2	8	0.58	0.50	0.40	19.00	3.51	103.0	23.20	227.33	552.58	277.75	169.82
10.3	8.3	8	0.58	0.50	0.40	19.00	3.51	104.3	23.20	233.16	554.41	278.68	154.93
10.4	8.4	8	0.58	0.50	0.40	19.00	3.50	105.6	23.20	238.99	556.24	279.60	139.98
10.5	8.5	8	0.58	0.50	0.40	19.00	3.50	106.8	23.20	244.82	558.08	280.52	124.96
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	108.1	0.00	244.82	0.00	0.00	104.81
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	109.3	0.00	244.82	0.00	0.00	103.56
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	110.6	0.00	244.82	0.00	0.00	102.30
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	111.8	0.00	244.82	0.00	0.00	322.54
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	113.1	0.00	244.82	0.00	0.00	544.41
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	114.4	0.00	244.82	0.00	0.00	767.90
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	115.6	0.00	244.82	0.00	0.00	993.02
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	116.9	0.00	244.82	0.00	0.00	1219.77
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	118.1	0.00	244.82	0.00	0.00	1448.12
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	119.4	0.00	244.82	0.00	0.00	1678.09
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	120.6	0.00	244.82	0.00	0.00	1909.67
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	121.9	0.00	244.82	0.00	0.00	2142.86
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	123.2	0.00	244.82	0.00	0.00	2377.64
11.9	9.9	10	0.70	0.50	0.93	40.00	55.34	124.4	55.13	258.67	6543.64	3289.19	2626.08
12.0	10.0	10	0.70	0.50	0.93	40.00	55.31	125.7	55.57	272.64	6591.83	3313.41	2654.71
12.1	10.1	10	0.70	0.50	0.93	40.00	55.27	126.9	56.02	286.72	6639.91	3337.58	2683.39
12.2	10.2	10	0.70	0.50	0.93	40.00	55.23	128.2	56.46	300.91	6687.89	3361.70	2712.13
12.3	10.3	10	0.70	0.50	0.93	40.00	55.19	129.4	56.91	315.21	6735.76	3385.76	2740.93
12.4	10.4	10	0.70	0.50	0.93	40.00	55.15	130.7	57.35	329.63	6783.52	3409.77	2769.78
12.5	10.5	10	0.70	0.50	0.93	40.00	55.11	131.9	57.80	344.15	6831.17	3433.72	2798.69
12.6	10.6	10	0.70	0.50	0.93	40.00	55.07	133.2	58.24	358.79	6878.71	3457.62	2827.65
12.7	10.7	10	0.70	0.50	0.93	40.00	55.03	134.5	58.69	373.54	6926.14	3481.46	2856.66
12.8	10.8	10	0.70	0.50	0.93	40.00	54.99	135.7	59.13	388.40	6973.46	3505.24	2885.73
12.9	10.9	10	0.70	0.50	0.93	40.00	54.95	137.0	59.58	403.37	7020.66	3528.97	2914.86
13.0	11.0	10	0.70	0.50	0.93	40.00	54.90	138.2	60.02	418.46	7067.75	3552.64	2944.03
13.1	11.1	10	0.70	0.50	0.93	40.00	54.86	139.5	60.47	433.66	7114.73	3576.25	2973.26
13.2	11.2	10	0.70	0.50	0.93	40.00	54.82	140.7	60.91	448.97	7161.59	3599.81	3002.54
13.3	11.3	10	0.70	0.50	0.93	40.00	54.78	142.0	61.36	464.39	7208.33	3623.30	3031.88
13.4	11.4	10	0.70	0.50	0.93	40.00	54.74	143.3	61.80	479.92	7254.96	3646.74	3061.26
13.5	11.5	10	0.70	0.50	0.93	40.00	54.69	144.5	62.25	495.56	7301.47	3670.12	3090.70
13.6	11.6	10	0.70	0.50	0.93	40.00	54.65	145.8	62.69	511.32	7347.86	3693.44	3120.19

13.7	11.7	10	0.70	0.50	0.93	40.00	54.61	147.0	63.14	527.19	7394.13	3716.70	3149.73
13.8	11.8	10	0.70	0.50	0.93	40.00	54.56	148.3	63.58	543.16	7440.28	3739.89	3179.32
13.9	11.9	10	0.70	0.50	0.93	40.00	54.52	149.5	64.02	559.26	7486.31	3763.03	3209.05
14.0	12.0	10	0.70	0.50	0.93	40.00	54.47	150.8	64.47	575.46	7532.21	3786.10	3238.92
14.1	12.1	10	0.70	0.50	0.93	40.00	54.43	152.1	64.91	591.77	7577.99	3809.11	3268.94
14.2	12.2	10	0.70	0.50	0.93	40.00	54.39	153.3	65.36	608.20	7623.65	3832.06	3299.11
14.3	12.3	10	0.70	0.50	0.93	40.00	54.34	154.6	65.80	624.74	7669.18	3854.95	3329.43
14.4	12.4	10	0.70	0.50	0.93	40.00	54.30	155.8	66.25	641.39	7714.58	3877.77	3359.90
14.5	12.5	10	0.70	0.50	0.93	40.00	54.25	157.1	66.69	658.15	7759.86	3900.53	3390.53
14.6	12.6	10	0.70	0.50	0.93	40.00	54.20	158.3	67.14	675.02	7805.01	3923.22	3421.31
14.7	12.7	10	0.70	0.50	0.93	40.00	54.16	159.6	67.58	692.01	7850.02	3945.85	3452.26
14.8	12.8	10	0.70	0.50	0.93	40.00	54.11	160.8	68.03	709.11	7894.91	3968.42	3483.37
14.9	12.9	10	0.70	0.50	0.93	40.00	54.08	162.1	68.47	726.32	7942.36	3992.26	3514.64
15.0	13.0	10	0.70	0.50	0.93	40.00	54.05	163.4	68.92	743.64	7989.75	4016.09	3546.00
15.1	13.1	10	0.70	0.50	0.93	40.00	54.03	164.6	69.36	761.07	8037.09	4039.88	3577.43
15.2	13.2	10	0.70	0.50	0.93	40.00	54.00	165.9	69.81	778.61	8084.38	4063.65	3608.94
15.3	13.3	10	0.70	0.50	0.93	40.00	53.97	167.1	70.25	796.27	8131.61	4087.40	3640.53
15.4	13.4	10	0.70	0.50	0.93	40.00	53.94	168.4	70.70	814.04	8178.80	4111.11	3379.48
15.5	13.5	10	0.70	0.50	0.93	40.00	53.91	169.6	71.14	831.92	8225.93	4134.80	3116.93
15.6	13.6	10	0.70	0.50	0.93	40.00	53.88	170.9	71.59	849.91	8273.01	4158.47	2852.88
15.7	13.7	10	0.70	0.50	0.93	40.00	53.86	172.2	72.03	868.01	8320.04	4182.11	2825.73
15.8	13.8	10	0.70	0.50	0.93	40.00	53.83	173.4	72.48	886.23	8367.02	4205.72	2798.35
15.9	13.9	10	0.70	0.50	0.93	40.00	53.80	174.7	72.92	904.55	8413.94	4229.31	2770.75
16.0	14.0	10	0.70	0.50	0.93	40.00	53.77	175.9	73.37	922.99	8460.82	4252.87	2742.91
16.1	14.1	10	0.70	0.50	0.93	40.00	53.74	177.2	73.81	941.54	8507.64	4276.41	2714.83
16.2	14.2	10	0.70	0.50	0.93	40.00	53.71	178.4	74.26	960.21	8554.41	4299.92	2686.53
16.3	14.3	10	0.70	0.50	0.93	40.00	53.69	179.7	74.70	978.98	8601.13	4323.40	2658.00
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	181.0	0.00	978.98	0.00	0.00	2612.82
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	182.2	0.00	978.98	0.00	0.00	2860.03
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	183.5	0.00	978.98	0.00	0.00	3108.48
16.7	14.7	12	0.70	0.50	0.86	37.70	42.94	184.7	70.54	996.71	7043.12	3540.26	3373.61
16.8	14.8	12	0.70	0.50	0.86	37.70	42.92	186.0	70.95	1014.54	7080.42	3559.01	3401.68
16.9	14.9	12	0.70	0.50	0.86	37.70	42.89	187.2	71.36	1032.48	7117.68	3577.74	3429.81
17.0	15.0	12	0.70	0.50	0.86	37.70	42.87	188.5	71.77	1050.52	7154.90	3596.45	3458.03

1.1.5 Calcolo del carico limite con riferimento alla prova CPTu3

1.1.5.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	3.3	19.35	35		0.70	0.50	0.70
2	2.5	4.4	19.35	35		0.70	0.50	0.70
3	4.4	5.2	18.33	22	30	0.66	0.50	0.40
4	5.2	5.9	19.35	35		0.70	0.50	0.70
5	5.9	9.7	18.33	22	30	0.66	0.50	0.40
6	9.7	10.5	19.35	38		0.70	0.50	0.79
7	10.5	11.6	18.33	22	80	0.35	0.50	0.40
8	11.6	11.9	19.35	36		0.70	0.50	0.73
9	11.9	13.4	19.35	42		0.70	0.50	0.90
10	13.4	14.5	19.35	36		0.70	0.50	0.73
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35	36		0.70	0.50	0.73
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35	36		0.70	0.50	0.73
15	26.0	29.6	18.33	22	150	0.35	0.50	0.40

1.1.5.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	6945	6861

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	2.8	10.45	3.94	737.02	833.55	716.73	10.45	3.94	737.02	833.55	716.73
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	5.7	10.78	8.00	760.58	860.19	737.17	10.78	8.00	760.58	860.19	737.17
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	8.5	11.12	12.19	784.14	886.84	757.73	11.12	12.19	784.14	886.84	757.73
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	11.3	11.45	16.51	807.70	913.49	777.93	11.45	16.51	807.70	913.49	777.93
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	14.1	11.78	20.95	831.26	940.13	798.23	11.78	20.95	831.26	940.13	798.23
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	17.0	12.12	25.52	854.82	966.78	818.64	12.12	25.52	854.82	966.78	818.64
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	19.8	12.45	30.22	878.38	993.42	839.14	12.45	30.22	878.38	993.42	839.14
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	22.6	12.79	35.04	901.94	1020.07	859.74	12.79	35.04	901.94	1020.07	859.74
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	25.4	13.12	39.98	925.50	1046.71	880.44	13.12	39.98	925.50	1046.71	880.44
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	28.3	13.45	45.06	949.06	1073.36	901.23	13.45	45.06	949.06	1073.36	901.23
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	31.1	13.79	50.25	972.62	1100.00	922.13	13.79	50.25	972.62	1100.00	922.13
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	33.9	14.12	55.58	996.18	1126.65	943.13	14.12	55.58	996.18	1126.65	943.13
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	36.8	14.46	61.03	1019.74	1153.29	964.22	14.46	61.03	1019.74	1153.29	964.22
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	39.6	14.76	66.59	1037.26	1173.11	985.41	14.76	66.59	1037.26	1173.11	985.41
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	42.4	15.10	72.28	1060.68	1199.60	935.72	15.10	72.28	1060.68	1199.60	922.84
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	45.2	15.43	78.10	1084.11	1226.09	884.50	15.43	78.10	1084.11	1226.09	858.82
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	48.1	15.76	84.04	1107.53	1252.59	831.74	15.76	84.04	1107.53	1252.59	793.36
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	50.9	16.10	90.11	1130.95	1279.08	777.44	16.10	90.11	1130.95	1279.08	726.45
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	53.7	16.43	96.31	1154.38	1305.57	721.62	16.43	96.31	1154.38	1305.57	658.10
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	56.5	16.76	102.63	1177.80	1332.06	664.25	16.76	102.63	1177.80	1332.06	588.31
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	59.4	17.10	109.07	1201.22	1358.55	605.35	17.10	109.07	1201.22	1358.55	517.08
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	62.2	17.43	115.64	1224.65	1385.04	544.92	17.43	115.64	1224.65	1385.04	444.40
4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	65.0	17.76	122.34	1248.07	1411.53	566.01	17.76	122.34	1248.07	1411.53	465.49

Breve termine

Lungo termine

Palo

4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	67.9	18.10	129.16	1271.49	1438.02	587.21	18.10	129.16	1271.49	1438.02	486.70
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	70.7	19.80	136.63	356.97	403.73	608.97	10.63	133.17	187.77	212.37	505.45
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	73.5	19.80	144.09	358.81	405.80	702.17	10.81	137.24	190.81	215.80	608.58
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	76.3	19.80	151.55	360.64	407.87	797.01	10.98	141.38	193.85	219.24	713.32
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	79.2	19.80	159.02	362.47	409.95	893.49	11.15	145.59	196.89	222.68	819.67
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	82.0	19.80	166.48	364.31	412.02	991.62	11.32	149.85	199.93	226.11	927.63
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	84.8	19.80	173.95	366.14	414.09	996.87	11.49	154.19	202.97	229.55	931.31
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	87.7	19.80	181.41	367.97	416.17	1002.12	11.67	158.59	206.01	232.99	935.05
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	90.5	19.80	188.88	369.80	418.24	1007.38	11.84	163.05	209.05	236.43	938.84
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	93.3	20.81	196.72	1462.27	1653.79	1012.96	20.81	170.89	1462.27	1653.79	945.58
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	96.1	21.15	204.69	1485.69	1680.28	935.59	21.15	178.87	1485.69	1680.28	857.21
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	99.0	21.48	212.79	1509.11	1706.77	856.69	21.48	186.96	1509.11	1706.77	767.40
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	101.8	21.81	221.01	1532.54	1733.26	776.25	21.81	195.19	1532.54	1733.26	676.14
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	104.6	22.15	229.36	1555.96	1759.75	694.28	22.15	203.54	1555.96	1759.75	583.44
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	107.4	22.48	237.84	1579.38	1786.24	610.77	22.48	212.01	1579.38	1786.24	489.30
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	110.3	22.81	246.44	1602.81	1812.73	525.73	22.81	220.61	1602.81	1812.73	393.72
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	253.90	385.18	435.63	438.05	13.36	225.65	235.91	266.81	293.48
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	261.37	387.02	437.70	443.25	13.53	230.75	238.95	270.24	297.64
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	268.83	388.85	439.78	448.45	13.70	235.91	241.99	273.68	301.85
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	276.30	390.68	441.85	453.65	13.88	241.14	245.03	277.12	306.11
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	283.76	392.51	443.92	458.85	14.05	246.44	248.07	280.56	310.44
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	291.22	394.35	446.00	464.05	14.22	251.80	251.10	283.99	314.82
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	298.69	396.18	448.07	469.25	14.39	257.23	254.14	287.43	319.26
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	306.15	398.01	450.14	474.45	14.56	262.72	257.18	290.87	323.75
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	313.62	399.85	452.22	479.65	14.74	268.27	260.22	294.30	328.30
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	321.08	401.68	454.29	484.85	14.91	273.89	263.26	297.74	332.90
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	328.55	403.51	456.36	490.04	15.08	279.58	266.30	301.18	337.57
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	336.01	405.35	458.43	495.24	15.25	285.33	269.34	304.62	342.29
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	343.48	407.18	460.51	500.44	15.42	291.14	272.38	308.05	347.06
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	350.94	409.01	462.58	505.64	15.60	297.02	275.42	311.49	351.89
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	358.40	410.84	464.65	510.84	15.77	302.97	278.46	314.93	356.78
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	365.87	412.68	466.73	516.04	15.94	308.98	281.50	318.37	361.73
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	373.33	414.51	468.80	521.24	16.11	315.05	284.54	321.80	366.73
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	380.80	416.34	470.87	526.44	16.29	321.19	287.58	325.24	371.78
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	388.26	418.18	472.95	531.64	16.46	327.40	290.62	328.68	376.90
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	395.73	420.01	475.02	536.84	16.63	333.67	293.65	332.12	382.07
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	403.19	421.84	477.09	542.03	16.80	340.00	296.69	335.55	387.30
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	410.66	423.68	479.17	547.23	16.97	346.40	299.73	338.99	392.58
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	418.12	425.51	481.24	552.43	17.15	352.86	302.77	342.43	397.92
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	425.58	427.34	483.31	557.63	17.32	359.39	305.81	345.86	403.31
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	433.05	429.17	485.38	562.83	17.49	365.99	308.85	349.30	408.77
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	440.51	431.01	487.46	568.03	17.66	372.64	311.89	352.74	414.27
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	447.98	432.84	489.53	573.23	17.83	379.37	314.93	356.18	419.84
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	455.44	434.67	491.60	578.43	18.01	386.16	317.97	359.61	425.46
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	462.91	436.51	493.68	818.78	18.18	393.01	321.01	363.05	674.17
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	470.37	438.34	495.75	1061.61	18.35	399.93	324.05	366.49	925.32
9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	477.84	440.17	497.82	1306.90	18.52	406.91	327.09	369.93	1178.90

9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	485.30	442.01	499.90	1554.67	18.70	413.96	330.13	373.36	1434.91
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	492.76	443.84	501.97	1804.90	18.87	421.07	333.17	376.80	1693.37
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	500.23	445.67	504.04	2057.61	19.04	428.25	336.20	380.24	1954.25
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	507.69	447.50	506.12	2312.79	19.21	435.49	339.24	383.68	2217.57
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	515.16	449.34	508.19	2570.43	19.38	442.80	342.28	387.11	2483.33
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	522.62	451.17	510.26	2609.97	19.56	450.17	345.32	390.55	2489.68
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	530.09	453.00	512.33	2649.50	19.73	457.61	348.36	393.99	2496.09
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	220.5	39.08	544.82	3542.49	4006.46	2695.35	39.08	472.34	3542.49	4006.46	2508.84
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	223.4	39.46	559.69	3576.76	4045.22	2506.17	39.46	487.22	3576.76	4045.22	2278.68
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	226.2	39.83	574.71	3611.03	4083.98	2314.65	39.83	502.23	3611.03	4083.98	2046.27
10.1	8.1	6	0.70	0.50	0.79	35.40	35.92	229.0	40.21	589.87	3645.30	4122.74	2120.78	40.21	517.39	3645.30	4122.74	1811.60
10.2	8.2	6	0.70	0.50	0.79	35.40	35.92	231.8	40.59	605.17	3679.57	4161.50	1924.56	40.59	532.70	3679.57	4161.50	1574.68
10.3	8.3	6	0.70	0.50	0.79	35.40	35.92	234.7	40.97	620.62	3713.85	4200.26	1726.00	40.97	548.14	3713.85	4200.26	1335.50
10.4	8.4	6	0.70	0.50	0.79	35.40	35.92	237.5	41.35	636.21	3748.12	4239.02	1525.09	41.35	563.73	3748.12	4239.02	1094.07
10.5	8.5	6	0.70	0.50	0.79	35.40	35.92	240.3	41.73	651.94	3782.39	4277.78	1321.83	41.73	579.46	3782.39	4277.78	850.39
10.6	8.6	7	0.35	0.50	0.40	19.00	3.57	243.2	28.00	662.49	920.32	1040.85	1111.60	21.44	587.54	378.63	428.22	597.67
10.7	8.7	7	0.35	0.50	0.40	19.00	3.57	246.0	28.00	673.05	922.15	1042.93	1294.27	21.61	595.69	381.67	431.65	819.51
10.8	8.8	7	0.35	0.50	0.40	19.00	3.57	248.8	28.00	683.60	923.98	1045.00	1478.74	21.79	603.90	384.70	435.09	1043.10
10.9	8.9	7	0.35	0.50	0.40	19.00	3.57	251.6	28.00	694.16	925.82	1047.07	1664.99	21.96	612.18	387.74	438.53	1268.44
11.0	9.0	7	0.35	0.50	0.40	19.00	3.57	254.5	28.00	704.71	927.65	1049.15	2057.94	22.13	620.52	390.78	441.97	1700.45
11.1	9.1	7	0.35	0.50	0.40	19.00	3.57	257.3	28.00	715.27	929.48	1051.22	2454.26	22.30	628.93	393.82	445.40	2135.79
11.2	9.2	7	0.35	0.50	0.40	19.00	3.57	260.1	28.00	725.83	931.31	1053.29	2853.95	22.47	637.40	396.86	448.84	2574.46
11.3	9.3	7	0.35	0.50	0.40	19.00	3.57	263.0	28.00	736.38	933.15	1055.36	3257.00	22.65	645.94	399.90	452.28	3016.46
11.4	9.4	7	0.35	0.50	0.40	19.00	3.57	265.8	28.00	746.94	934.98	1057.44	3663.42	22.82	654.54	402.94	455.71	3461.79
11.5	9.5	7	0.35	0.50	0.40	19.00	3.57	268.6	28.00	757.49	936.81	1059.51	4073.19	22.99	663.21	405.98	459.15	3910.44
11.6	9.6	7	0.35	0.50	0.40	19.00	3.57	271.4	28.00	768.05	938.65	1061.58	4486.31	23.16	671.94	409.02	462.59	4362.41
11.7	9.7	8	0.70	0.50	0.73	33.10	27.98	274.3	42.15	783.94	3235.45	3659.21	4907.43	42.15	687.83	3235.45	3659.21	4823.86
11.8	9.8	8	0.70	0.50	0.73	33.10	27.97	277.1	42.50	799.96	3260.82	3687.90	5157.22	42.50	703.86	3260.82	3687.90	5073.65
11.9	9.9	8	0.70	0.50	0.73	33.10	27.96	279.9	42.85	816.12	3286.16	3716.56	5408.67	42.85	720.01	3286.16	3716.56	5325.10
12.0	10.0	9	0.70	0.50	0.90	38.85	50.66	282.7	53.06	836.12	6001.94	6788.03	5665.03	53.06	740.01	6001.94	6788.03	5581.46
12.1	10.1	9	0.70	0.50	0.90	38.85	50.64	285.6	53.49	856.28	6048.05	6840.18	5718.16	53.49	760.18	6048.05	6840.18	5634.59
12.2	10.2	9	0.70	0.50	0.90	38.85	50.62	288.4	53.91	876.61	6094.11	6892.27	5771.39	53.91	780.50	6094.11	6892.27	5687.82
12.3	10.3	9	0.70	0.50	0.90	38.85	50.60	291.2	54.34	897.09	6140.12	6944.31	5824.72	54.34	800.99	6140.12	6944.31	5741.15
12.4	10.4	9	0.70	0.50	0.90	38.85	50.58	294.1	54.77	917.74	6186.09	6996.30	5878.15	54.77	821.63	6186.09	6996.30	5794.58
12.5	10.5	9	0.70	0.50	0.90	38.85	50.57	296.9	55.19	938.55	6232.00	7048.23	5703.14	55.19	842.44	6232.00	7048.23	5619.57
12.6	10.6	9	0.70	0.50	0.90	38.85	50.55	299.7	55.62	959.52	6277.87	7100.11	5526.66	55.62	863.41	6277.87	7100.11	5443.09
12.7	10.7	9	0.70	0.50	0.90	38.85	50.53	302.5	56.05	980.65	6323.69	7151.93	5348.72	56.05	884.54	6323.69	7151.93	5265.15
12.8	10.8	9	0.70	0.50	0.90	38.85	50.51	305.4	56.48	1001.94	6369.47	7203.70	5169.32	56.48	905.83	6369.47	7203.70	5085.75
12.9	10.9	9	0.70	0.50	0.90	38.85	50.49	308.2	56.90	1023.39	6415.19	7255.41	4988.45	56.90	927.28	6415.19	7255.41	4904.88
13.0	11.0	9	0.70	0.50	0.90	38.85	50.47	311.0	57.33	1045.00	6460.86	7307.06	4806.13	57.33	948.90	6460.86	7307.06	4722.56
13.1	11.1	9	0.70	0.50	0.90	38.85	50.45	313.8	57.76	1066.78	6506.48	7358.66	4622.35	57.76	970.67	6506.48	7358.66	4538.78
13.2	11.2	9	0.70	0.50	0.90	38.85	50.43	316.7	58.18	1088.71	6552.06	7410.20	4437.11	58.18	992.60	6552.06	7410.20	4353.54
13.3	11.3	9	0.70	0.50	0.90	38.85	50.41	319.5	58.61	1110.81	6597.58	7461.69	4250.41	58.61	1014.70	6597.58	7461.69	4166.84
13.4	11.4	9	0.70	0.50	0.90	38.85	50.39	322.3	59.04	1133.06	6643.05	7513.11	4062.26	59.04	1036.96	6643.05	7513.11	3978.69
13.5	11.5	10	0.70	0.50	0.73	33.10	27.77	325.2	48.41	1151.32	3687.68	4170.67	3869.04	48.41	1055.21	3687.68	4170.67	3785.47
13.6	11.6	10	0.70	0.50	0.73	33.10	27.76	328.0	48.76	1169.70	3712.52	4198.76	4090.65	48.76	1073.59	3712.52	4198.76	4007.08
13.7	11.7	10	0.70	0.50	0.73	33.10	27.75	330.8	49.11	1188.21	3737.33	4226.82	4313.53	49.11	1092.11	3737.33	4226.82	4229.96

13.8	11.8	10	0.70	0.50	0.73	33.10	27.73	333.6	49.46	1206.86	3762.11	4254.85	4537.68	49.46	1110.75	3762.11	4254.85	4454.11
13.9	11.9	10	0.70	0.50	0.73	33.10	27.72	336.5	49.81	1225.63	3786.86	4282.84	4763.09	49.81	1129.53	3786.86	4282.84	4679.52
14.0	12.0	10	0.70	0.50	0.73	33.10	27.71	339.3	50.15	1244.54	3811.58	4310.79	4989.76	50.15	1148.44	3811.58	4310.79	4906.19
14.1	12.1	10	0.70	0.50	0.73	33.10	27.70	342.1	50.50	1263.58	3836.26	4338.71	5217.70	50.50	1167.48	3836.26	4338.71	5134.13
14.2	12.2	10	0.70	0.50	0.73	33.10	27.68	344.9	50.85	1282.75	3860.92	4366.60	5446.89	50.85	1186.65	3860.92	4366.60	5363.32
14.3	12.3	10	0.70	0.50	0.73	33.10	27.67	347.8	51.20	1302.05	3885.54	4394.44	5677.35	51.20	1205.95	3885.54	4394.44	5593.78
14.4	12.4	10	0.70	0.50	0.73	33.10	27.66	350.6	51.55	1321.48	3910.13	4422.25	5909.06	51.55	1225.38	3910.13	4422.25	5825.49
14.5	12.5	10	0.70	0.50	0.73	33.10	27.65	353.4	51.89	1341.05	3934.69	4450.03	6142.03	51.89	1244.94	3934.69	4450.03	6058.46
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	1364.28	6424.74	7266.21	6379.33	61.62	1268.17	6424.74	7266.21	6295.76
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	1387.66	6464.73	7311.44	6430.12	62.03	1291.56	6464.73	7311.44	6346.55
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	1411.20	6504.67	7356.61	6481.01	62.44	1315.10	6504.67	7356.61	6397.44
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	1434.90	6544.56	7401.73	6531.99	62.85	1338.79	6544.56	7401.73	6448.42
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1458.74	6584.40	7446.78	6583.06	63.26	1362.64	6584.40	7446.78	6499.49
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1482.75	6624.19	7491.78	6634.22	63.67	1386.64	6624.19	7491.78	6550.65
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1506.91	6663.93	7536.72	6685.47	64.08	1410.80	6663.93	7536.72	6601.90
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1531.22	6703.61	7581.61	6529.15	64.49	1435.11	6703.61	7581.61	6445.58
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1555.69	6743.25	7626.43	6371.78	64.90	1459.58	6743.25	7626.43	6288.21
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1580.31	6782.83	7671.20	6213.33	65.31	1484.20	6782.83	7671.20	6129.76
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1605.09	6822.36	7715.90	6053.82	65.72	1508.98	6822.36	7715.90	5970.25
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1630.02	6861.83	7760.55	5893.25	66.13	1533.91	6861.83	7760.55	5809.68
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1655.10	6901.26	7805.14	5731.62	66.54	1559.00	6901.26	7805.14	5648.05
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1680.35	6940.63	7849.66	5568.92	66.95	1584.24	6940.63	7849.66	5485.35
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1705.74	6979.94	7894.13	5405.17	67.36	1609.64	6979.94	7894.13	5321.60
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1731.29	7019.21	7938.54	5240.36	67.77	1635.19	7019.21	7938.54	5156.79
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1757.00	7058.42	7982.88	5074.49	68.18	1660.89	7058.42	7982.88	4990.92
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.15	1778.92	4371.03	4943.52	5123.30	58.15	1682.81	4371.03	4943.52	5039.73
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.50	1800.97	4394.94	4970.56	5379.82	58.50	1704.87	4394.94	4970.56	5296.25
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	58.85	1823.16	4418.82	4997.57	5637.57	58.85	1727.05	4418.82	4997.57	5554.00
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.20	1845.48	4442.66	5024.53	5896.54	59.20	1749.37	4442.66	5024.53	5812.97
16.7	14.7	12	0.70	0.50	0.73	33.10	27.35	415.6	59.55	1867.93	4466.47	5051.46	6156.73	59.55	1771.82	4466.47	5051.46	6073.16
16.8	14.8	12	0.70	0.50	0.73	33.10	27.33	418.5	59.89	1890.50	4490.24	5078.34	6418.14	59.89	1794.40	4490.24	5078.34	6334.57
16.9	14.9	12	0.70	0.50	0.73	33.10	27.32	421.3	60.24	1913.22	4513.97	5105.18	6680.77	60.24	1817.11	4513.97	5105.18	6597.20
17.0	15.0	12	0.70	0.50	0.73	33.10	27.31	424.1	60.59	1936.06	4537.67	5131.98	6944.61	60.59	1839.95	4537.67	5131.98	6861.04

1.1.5.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	4990	4921

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	2.0	10.45	3.28	737.02	578.85	498.20	10.45	3.28	737.02	578.85	498.20
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	3.9	10.78	6.67	760.58	597.36	512.89	10.78	6.67	760.58	597.36	512.89
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	5.9	11.12	10.16	784.14	615.86	527.67	11.12	10.16	784.14	615.86	527.67
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	7.9	11.45	13.76	807.70	634.36	542.22	11.45	13.76	807.70	634.36	542.22
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	9.8	11.78	17.46	831.26	652.87	556.86	11.78	17.46	831.26	652.87	556.86
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	11.8	12.12	21.27	854.82	671.37	571.58	12.12	21.27	854.82	671.37	571.58
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	13.7	12.45	25.18	878.38	689.88	586.38	12.45	25.18	878.38	689.88	586.38
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	15.7	12.79	29.20	901.94	708.38	601.27	12.79	29.20	901.94	708.38	601.27
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	17.7	13.12	33.32	925.50	726.88	616.24	13.12	33.32	925.50	726.88	616.24
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	19.6	13.45	37.55	949.06	745.39	631.30	13.45	37.55	949.06	745.39	631.30
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	21.6	13.79	41.88	972.62	763.89	646.44	13.79	41.88	972.62	763.89	646.44
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	23.6	14.12	46.32	996.18	782.40	661.66	14.12	46.32	996.18	782.40	661.66
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	25.5	14.46	50.86	1019.74	800.90	676.97	14.46	50.86	1019.74	800.90	676.97
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	27.5	14.76	55.49	1037.26	814.66	692.36	14.76	55.49	1037.26	814.66	692.36
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	29.5	15.10	60.24	1060.68	833.06	658.54	15.10	60.24	1060.68	833.06	649.59
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	31.4	15.43	65.08	1084.11	851.45	623.67	15.43	65.08	1084.11	851.45	605.83
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	33.4	15.76	70.04	1107.53	869.85	587.75	15.76	70.04	1107.53	869.85	561.09
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	35.3	16.10	75.09	1130.95	888.25	550.78	16.10	75.09	1130.95	888.25	515.36
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	37.3	16.43	80.26	1154.38	906.64	512.75	16.43	80.26	1154.38	906.64	468.65
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	39.3	16.76	85.52	1177.80	925.04	473.68	16.76	85.52	1177.80	925.04	420.94
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	41.2	17.10	90.89	1201.22	943.44	433.56	17.10	90.89	1201.22	943.44	372.25
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	43.2	17.43	96.37	1224.65	961.83	392.38	17.43	96.37	1224.65	961.83	322.58

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	45.2	17.76	101.95	1248.07	980.23	407.84	17.76	101.95	1248.07	980.23	338.03
4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	47.1	18.10	107.63	1271.49	998.63	423.39	18.10	107.63	1271.49	998.63	353.58
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	49.1	19.80	113.85	356.97	280.37	439.40	10.63	110.98	187.77	147.48	367.09
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	51.1	19.80	120.08	358.81	281.81	505.02	10.81	114.37	190.81	149.86	439.20
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	53.0	19.80	126.30	360.64	283.25	571.78	10.98	117.82	193.85	152.25	512.44
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	55.0	19.80	132.52	362.47	284.68	639.68	11.15	121.32	196.89	154.64	586.80
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	56.9	19.80	138.74	364.31	286.12	708.73	11.32	124.88	199.93	157.02	662.29
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	58.9	19.80	144.96	366.14	287.56	713.28	11.49	128.49	202.97	159.41	665.37
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	60.9	19.80	151.18	367.97	289.00	717.83	11.67	132.15	206.01	161.80	668.49
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	62.8	19.80	157.40	369.80	290.44	722.38	11.84	135.87	209.05	164.19	671.67
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	64.8	20.81	163.94	1462.27	1148.46	727.20	20.81	142.41	1462.27	1148.46	677.29
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	66.8	21.15	170.58	1485.69	1166.86	674.44	21.15	149.06	1485.69	1166.86	616.89
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	68.7	21.48	177.33	1509.11	1185.26	620.62	21.48	155.80	1509.11	1185.26	555.50
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	70.7	21.81	184.18	1532.54	1203.65	565.76	21.81	162.66	1532.54	1203.65	493.12
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	72.6	22.15	191.14	1555.96	1222.05	509.84	22.15	169.61	1555.96	1222.05	429.75
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	74.6	22.48	198.20	1579.38	1240.45	452.87	22.48	176.67	1579.38	1240.45	365.40
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	76.6	22.81	205.36	1602.81	1258.84	394.85	22.81	183.84	1602.81	1258.84	300.06
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	211.59	385.18	302.52	334.87	13.36	188.04	235.91	185.28	231.06
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	217.81	387.02	303.96	339.38	13.53	192.29	238.95	187.67	234.56
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	224.03	388.85	305.40	343.89	13.70	196.59	241.99	190.06	238.11
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	230.25	390.68	306.84	348.40	13.88	200.95	245.03	192.44	241.70
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	236.47	392.51	308.28	352.92	14.05	205.37	248.07	194.83	245.35
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	242.69	394.35	309.72	357.43	14.22	209.83	251.10	197.22	249.04
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	248.91	396.18	311.16	361.94	14.39	214.36	254.14	199.60	252.77
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	255.13	398.01	312.60	366.45	14.56	218.93	257.18	201.99	256.55
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	261.35	399.85	314.04	370.96	14.74	223.56	260.22	204.38	260.39
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	267.57	401.68	315.48	375.48	14.91	228.24	263.26	206.77	264.26
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	273.79	403.51	316.92	379.99	15.08	232.98	266.30	209.15	268.19
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	280.01	405.35	318.36	384.50	15.25	237.77	269.34	211.54	272.16
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	286.23	407.18	319.80	389.01	15.42	242.62	272.38	213.93	276.18
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	292.45	409.01	321.24	393.52	15.60	247.52	275.42	216.31	280.24
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	298.67	410.84	322.68	398.04	15.77	252.47	278.46	218.70	284.36
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	304.89	412.68	324.12	402.55	15.94	257.48	281.50	221.09	288.51
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	311.11	414.51	325.56	407.06	16.11	262.54	284.54	223.47	292.72
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	317.33	416.34	327.00	411.57	16.29	267.66	287.58	225.86	296.97
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	323.55	418.18	328.43	416.08	16.46	272.83	290.62	228.25	301.28
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	329.77	420.01	329.87	420.60	16.63	278.06	293.65	230.64	305.62
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	335.99	421.84	331.31	425.11	16.80	283.33	296.69	233.02	310.02
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	342.21	423.68	332.75	429.62	16.97	288.67	299.73	235.41	314.46
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	348.43	425.51	334.19	434.13	17.15	294.05	302.77	237.80	318.95
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	354.65	427.34	335.63	438.64	17.32	299.49	305.81	240.18	323.48
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	360.87	429.17	337.07	443.15	17.49	304.99	308.85	242.57	328.07
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	367.09	431.01	338.51	447.67	17.66	310.54	311.89	244.96	332.70
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	373.31	432.84	339.95	452.18	17.83	316.14	314.93	247.35	337.37
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	379.53	434.67	341.39	456.69	18.01	321.80	317.97	249.73	342.10
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	385.76	436.51	342.83	624.50	18.18	327.51	321.01	252.12	515.64
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	391.98	438.34	344.27	794.03	18.35	333.27	324.05	254.51	690.88

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	398.20	440.17	345.71	965.28	18.52	339.09	327.09	256.89	867.82
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	404.42	442.01	347.15	1138.15	18.70	344.97	330.13	259.28	1046.37
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	410.64	443.84	348.59	1312.65	18.87	350.89	333.17	261.67	1226.53
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	416.86	445.67	350.03	1488.76	19.04	356.87	336.20	264.05	1408.30
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	423.08	447.50	351.47	1666.50	19.21	362.91	339.24	266.44	1591.66
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	429.30	449.34	352.91	1845.86	19.38	369.00	342.28	268.83	1776.63
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	435.52	451.17	354.35	1874.21	19.56	375.14	345.32	271.22	1781.85
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	441.74	453.00	355.79	1902.57	19.73	381.34	348.36	273.60	1787.10
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	153.2	39.08	454.02	3542.49	2782.26	1936.19	39.08	393.62	3542.49	2782.26	1797.62
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	155.1	39.46	466.41	3576.76	2809.18	1806.61	39.46	406.01	3576.76	2809.18	1639.46
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	157.1	39.83	478.93	3611.03	2836.10	1675.42	39.83	418.53	3611.03	2836.10	1479.73
10.1	8.1	6	0.70	0.50	0.79	35.40	35.91	159.0	40.21	491.56	3643.61	2861.69	1542.62	40.21	431.16	3643.61	2861.69	1318.44
10.2	8.2	6	0.70	0.50	0.79	35.40	35.89	161.0	40.59	504.31	3676.15	2887.24	1408.29	40.59	443.91	3676.15	2887.24	1155.67
10.3	8.3	6	0.70	0.50	0.79	35.40	35.87	163.0	40.97	517.18	3708.65	2912.77	1272.45	40.97	456.78	3708.65	2912.77	991.43
10.4	8.4	6	0.70	0.50	0.79	35.40	35.86	164.9	41.35	530.17	3741.11	2938.26	1135.08	41.35	469.77	3741.11	2938.26	825.72
10.5	8.5	6	0.70	0.50	0.79	35.40	35.84	166.9	41.73	543.28	3773.52	2963.72	996.20	41.73	482.88	3773.52	2963.72	658.54
10.6	8.6	7	0.35	0.50	0.40	19.00	3.55	168.9	28.00	552.08	920.32	722.81	851.96	21.44	489.62	377.07	296.15	484.25
10.7	8.7	7	0.35	0.50	0.40	19.00	3.55	170.8	28.00	560.87	922.15	724.25	978.68	21.61	496.41	379.83	298.32	637.96
10.8	8.8	7	0.35	0.50	0.40	19.00	3.55	172.8	28.00	569.67	923.98	725.69	1106.61	21.79	503.25	382.58	300.48	792.87
10.9	8.9	7	0.35	0.50	0.40	19.00	3.55	174.8	28.00	578.47	925.82	727.13	1235.75	21.96	510.15	385.34	302.64	949.00
11.0	9.0	7	0.35	0.50	0.40	19.00	3.54	176.7	28.00	587.26	927.65	728.57	1507.46	22.13	517.10	388.08	304.80	1247.69
11.1	9.1	7	0.35	0.50	0.40	19.00	3.54	178.7	28.00	596.06	929.48	730.01	1781.45	22.30	524.11	390.82	306.95	1548.66
11.2	9.2	7	0.35	0.50	0.40	19.00	3.54	180.6	28.00	604.85	931.31	731.45	2057.72	22.47	531.17	393.56	309.10	1851.91
11.3	9.3	7	0.35	0.50	0.40	19.00	3.54	182.6	28.00	613.65	933.15	732.89	2336.27	22.65	538.28	396.29	311.24	2157.44
11.4	9.4	7	0.35	0.50	0.40	19.00	3.53	184.6	28.00	622.45	934.98	734.33	2617.09	22.82	545.45	399.01	313.38	2465.24
11.5	9.5	7	0.35	0.50	0.40	19.00	3.53	186.5	28.00	631.24	936.81	735.77	2900.18	22.99	552.68	401.73	315.52	2775.31
11.6	9.6	7	0.35	0.50	0.40	19.00	3.53	188.5	28.00	640.04	938.65	737.21	3185.54	23.16	559.95	404.45	317.65	3087.64
11.7	9.7	8	0.70	0.50	0.73	33.10	27.75	190.5	42.15	653.28	3208.79	2520.17	3477.02	42.15	573.20	3208.79	2520.17	3407.38
11.8	9.8	8	0.70	0.50	0.73	33.10	27.74	192.4	42.50	666.64	3233.52	2539.60	3650.89	42.50	586.55	3233.52	2539.60	3581.25
11.9	9.9	8	0.70	0.50	0.73	33.10	27.72	194.4	42.85	680.10	3258.22	2559.00	3825.90	42.85	600.01	3258.22	2559.00	3756.26
12.0	10.0	9	0.70	0.50	0.90	38.85	50.27	196.3	53.06	696.77	5955.66	4677.57	4004.75	53.06	616.68	5955.66	4677.57	3935.11
12.1	10.1	9	0.70	0.50	0.90	38.85	50.24	198.3	53.49	713.57	6000.67	4712.92	4043.39	53.49	633.48	6000.67	4712.92	3973.75
12.2	10.2	9	0.70	0.50	0.90	38.85	50.22	200.3	53.91	730.51	6045.61	4748.21	4082.10	53.91	650.42	6045.61	4748.21	4012.46
12.3	10.3	9	0.70	0.50	0.90	38.85	50.19	202.2	54.34	747.58	6090.49	4783.46	4120.90	54.34	667.49	6090.49	4783.46	4051.26
12.4	10.4	9	0.70	0.50	0.90	38.85	50.17	204.2	54.77	764.78	6135.30	4818.66	4159.77	54.77	684.69	6135.30	4818.66	4090.13
12.5	10.5	9	0.70	0.50	0.90	38.85	50.14	206.2	55.19	782.12	6180.05	4853.80	4041.34	55.19	702.03	6180.05	4853.80	3971.70
12.6	10.6	9	0.70	0.50	0.90	38.85	50.12	208.1	55.62	799.60	6224.73	4888.89	3921.93	55.62	719.51	6224.73	4888.89	3852.29
12.7	10.7	9	0.70	0.50	0.90	38.85	50.09	210.1	56.05	817.20	6269.34	4923.93	3801.55	56.05	737.12	6269.34	4923.93	3731.90
12.8	10.8	9	0.70	0.50	0.90	38.85	50.07	212.1	56.48	834.95	6313.89	4958.91	3680.18	56.48	754.86	6313.89	4958.91	3610.54
12.9	10.9	9	0.70	0.50	0.90	38.85	50.04	214.0	56.90	852.82	6358.36	4993.85	3557.84	56.90	772.74	6358.36	4993.85	3488.20
13.0	11.0	9	0.70	0.50	0.90	38.85	50.02	216.0	57.33	870.83	6402.77	5028.73	3434.53	57.33	790.75	6402.77	5028.73	3364.89
13.1	11.1	9	0.70	0.50	0.90	38.85	49.99	217.9	57.76	888.98	6447.11	5063.55	3310.24	57.76	808.89	6447.11	5063.55	3240.60
13.2	11.2	9	0.70	0.50	0.90	38.85	49.96	219.9	58.18	907.26	6491.39	5098.32	3184.98	58.18	827.17	6491.39	5098.32	3115.34
13.3	11.3	9	0.70	0.50	0.90	38.85	49.94	221.9	58.61	925.67	6535.59	5133.04	3058.76	58.61	845.58	6535.59	5133.04	2989.11
13.4	11.4	9	0.70	0.50	0.90	38.85	49.91	223.8	59.04	944.22	6579.72	5167.70	2931.56	59.04	864.13	6579.72	5167.70	2861.92
13.5	11.5	10	0.70	0.50	0.73	33.10	27.47	225.8	48.41	959.43	3648.11	2865.22	2800.38	48.41	879.34	3648.11	2865.22	2730.73
13.6	11.6	10	0.70	0.50	0.73	33.10	27.46	227.8	48.76	974.75	3672.13	2884.08	2954.68	48.76	894.66	3672.13	2884.08	2885.04

13.7	11.7	10	0.70	0.50	0.73	33.10	27.44	229.7	49.11	990.18	3696.11	2902.92	3109.85	49.11	910.09	3696.11	2902.92	3040.21
13.8	11.8	10	0.70	0.50	0.73	33.10	27.42	231.7	49.46	1005.72	3720.05	2921.72	3265.88	49.46	925.63	3720.05	2921.72	3196.24
13.9	11.9	10	0.70	0.50	0.73	33.10	27.41	233.7	49.81	1021.36	3743.95	2940.49	3422.77	49.81	941.27	3743.95	2940.49	3353.13
14.0	12.0	10	0.70	0.50	0.73	33.10	27.39	235.6	50.15	1037.12	3767.80	2959.22	3580.52	50.15	957.03	3767.80	2959.22	3510.88
14.1	12.1	10	0.70	0.50	0.73	33.10	27.37	237.6	50.50	1052.98	3791.61	2977.92	3739.12	50.50	972.90	3791.61	2977.92	3669.48
14.2	12.2	10	0.70	0.50	0.73	33.10	27.36	239.5	50.85	1068.96	3815.37	2996.59	3898.58	50.85	988.87	3815.37	2996.59	3828.94
14.3	12.3	10	0.70	0.50	0.73	33.10	27.34	241.5	51.20	1085.04	3839.10	3015.22	4058.90	51.20	1004.96	3839.10	3015.22	3989.26
14.4	12.4	10	0.70	0.50	0.73	33.10	27.32	243.5	51.55	1101.24	3862.78	3033.82	4220.06	51.55	1021.15	3862.78	3033.82	4150.42
14.5	12.5	10	0.70	0.50	0.73	33.10	27.31	245.4	51.89	1117.54	3886.41	3052.38	4382.08	51.89	1037.45	3886.41	3052.38	4312.44
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	1136.90	6350.93	4988.01	4547.51	61.62	1056.81	6350.93	4988.01	4477.87
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	1156.39	6389.47	5018.28	4584.70	62.03	1076.30	6389.47	5018.28	4515.06
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	1176.00	6427.93	5048.49	4621.97	62.44	1095.91	6427.93	5048.49	4552.33
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	1195.75	6466.33	5078.64	4659.30	62.85	1115.66	6466.33	5078.64	4589.66
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	1215.62	6504.65	5108.74	4696.71	63.26	1135.53	6504.65	5108.74	4627.07
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	1235.62	6542.91	5138.79	4734.18	63.67	1155.54	6542.91	5138.79	4664.54
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	1255.76	6581.09	5168.78	4771.73	64.08	1175.67	6581.09	5168.78	4702.08
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	1276.02	6619.20	5198.71	4666.95	64.49	1195.93	6619.20	5198.71	4597.30
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	1296.41	6657.24	5228.58	4561.47	64.90	1216.32	6657.24	5228.58	4491.83
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	1316.92	6695.20	5258.40	4455.29	65.31	1236.84	6695.20	5258.40	4385.65
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	1337.57	6733.10	5288.16	4348.41	65.72	1257.48	6733.10	5288.16	4278.77
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	1358.35	6770.92	5317.87	4240.84	66.13	1278.26	6770.92	5317.87	4171.20
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1379.25	6808.66	5347.51	4132.57	66.54	1299.17	6808.66	5347.51	4062.93
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1400.29	6846.33	5377.10	4023.60	66.95	1320.20	6846.33	5377.10	3953.96
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1421.45	6883.93	5406.63	3913.95	67.36	1341.36	6883.93	5406.63	3844.31
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1442.74	6921.45	5436.10	3803.60	67.77	1362.65	6921.45	5436.10	3733.96
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1464.16	6958.90	5465.51	3692.56	68.18	1384.08	6958.90	5465.51	3622.92
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.15	1482.43	4303.98	3380.34	3728.00	58.15	1402.35	4303.98	3380.34	3658.35
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.50	1500.81	4326.73	3398.21	3905.87	58.50	1420.72	4326.73	3398.21	3836.23
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	58.85	1519.30	4349.43	3416.03	4084.57	58.85	1439.21	4349.43	3416.03	4014.93
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.20	1537.90	4372.07	3433.82	4264.08	59.20	1457.81	4372.07	3433.82	4194.44
16.7	14.7	12	0.70	0.50	0.73	33.10	26.91	288.6	59.55	1556.60	4394.67	3451.56	4444.41	59.55	1476.52	4394.67	3451.56	4374.76
16.8	14.8	12	0.70	0.50	0.73	33.10	26.89	290.6	59.89	1575.42	4417.21	3469.27	4625.55	59.89	1495.33	4417.21	3469.27	4555.90
16.9	14.9	12	0.70	0.50	0.73	33.10	26.87	292.6	60.24	1594.35	4439.71	3486.94	4807.50	60.24	1514.26	4439.71	3486.94	4737.86
17.0	15.0	12	0.70	0.50	0.73	33.10	26.85	294.5	60.59	1613.38	4462.15	3504.57	4990.26	60.59	1533.29	4462.15	3504.57	4920.62

1.1.5.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3376	3320

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	1.3	10.45	2.63	737.02	370.47	319.31	10.45	2.63	737.02	370.47	319.31
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	2.5	10.78	5.34	760.58	382.31	329.18	10.78	5.34	760.58	382.31	329.18
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	3.8	11.12	8.13	784.14	394.15	339.12	11.12	8.13	784.14	394.15	339.12
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	5.0	11.45	11.01	807.70	405.99	348.94	11.45	11.01	807.70	405.99	348.94
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	6.3	11.78	13.97	831.26	417.84	358.82	11.78	13.97	831.26	417.84	358.82
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	7.5	12.12	17.02	854.82	429.68	368.77	12.12	17.02	854.82	429.68	368.77
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	8.8	12.45	20.14	878.38	441.52	378.79	12.45	20.14	878.38	441.52	378.79
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	10.1	12.79	23.36	901.94	453.36	388.88	12.79	23.36	901.94	453.36	388.88
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	11.3	13.12	26.66	925.50	465.21	399.03	13.12	26.66	925.50	465.21	399.03
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	12.6	13.45	30.04	949.06	477.05	409.26	13.45	30.04	949.06	477.05	409.26
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	13.8	13.79	33.50	972.62	488.89	419.55	13.79	33.50	972.62	488.89	419.55
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	15.1	14.12	37.05	996.18	500.73	429.91	14.12	37.05	996.18	500.73	429.91
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	16.3	14.46	40.69	1019.74	512.58	440.34	14.46	40.69	1019.74	512.58	440.34
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	17.6	14.76	44.40	1037.26	521.38	450.83	14.76	44.40	1037.26	521.38	450.83
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	18.8	15.10	48.19	1060.68	533.16	429.84	15.10	48.19	1060.68	533.16	424.12
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	20.1	15.43	52.07	1084.11	544.93	408.20	15.43	52.07	1084.11	544.93	396.79
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	21.4	15.76	56.03	1107.53	556.70	385.90	15.76	56.03	1107.53	556.70	368.84
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	22.6	16.10	60.08	1130.95	568.48	362.94	16.10	60.08	1130.95	568.48	340.28
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	23.9	16.43	64.20	1154.38	580.25	339.33	16.43	64.20	1154.38	580.25	311.10
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	25.1	16.76	68.42	1177.80	592.03	315.05	16.76	68.42	1177.80	592.03	281.30
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	26.4	17.10	72.71	1201.22	603.80	290.12	17.10	72.71	1201.22	603.80	250.89
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	27.6	17.43	77.10	1224.65	615.57	264.53	17.43	77.10	1224.65	615.57	219.86

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	28.9	17.76	81.56	1248.07	627.35	275.20	17.76	81.56	1248.07	627.35	230.53
4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	30.2	18.10	86.11	1271.49	639.12	285.94	18.10	86.11	1271.49	639.12	241.27
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	31.4	19.80	91.08	356.97	179.43	297.06	10.63	88.78	187.77	94.38	250.38
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	32.7	19.80	96.06	358.81	180.36	339.92	10.81	91.50	190.81	95.91	297.00
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	33.9	19.80	101.04	360.64	181.28	383.51	10.98	94.25	193.85	97.44	344.35
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	35.2	19.80	106.01	362.47	182.20	427.83	11.15	97.06	196.89	98.97	392.43
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	36.4	19.80	110.99	364.31	183.12	472.89	11.32	99.90	199.93	100.50	441.24
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	37.7	19.80	115.97	366.14	184.04	476.67	11.49	102.79	202.97	102.02	443.71
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	39.0	19.80	120.94	367.97	184.96	480.44	11.67	105.72	206.01	103.55	446.22
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	40.2	19.80	125.92	369.80	185.88	484.22	11.84	108.70	209.05	105.08	448.77
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	41.5	20.81	131.15	1462.27	735.02	488.22	20.81	113.93	1462.27	735.02	453.28
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	42.7	21.15	136.46	1485.69	746.79	455.37	21.15	119.24	1485.69	746.79	415.55
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	44.0	21.48	141.86	1509.11	758.56	421.87	21.48	124.64	1509.11	758.56	377.19
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	45.2	21.81	147.34	1532.54	770.34	387.71	21.81	130.12	1532.54	770.34	338.22
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	46.5	22.15	152.91	1555.96	782.11	352.89	22.15	135.69	1555.96	782.11	298.64
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	47.8	22.48	158.56	1579.38	793.89	317.41	22.48	141.34	1579.38	793.89	258.44
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	49.0	22.81	164.29	1602.81	805.66	281.28	22.81	147.07	1602.81	805.66	217.62
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	169.27	385.18	193.61	243.75	13.36	150.43	235.91	118.58	174.04
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	174.24	387.02	194.53	247.51	13.53	153.83	238.95	120.11	176.87
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	179.22	388.85	195.46	251.26	13.70	157.28	241.99	121.64	179.74
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	184.20	390.68	196.38	255.01	13.88	160.76	245.03	123.16	182.65
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	189.17	392.51	197.30	258.77	14.05	164.29	248.07	124.69	185.59
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	194.15	394.35	198.22	262.52	14.22	167.87	251.10	126.22	188.58
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	199.13	396.18	199.14	266.27	14.39	171.48	254.14	127.75	191.60
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	204.10	398.01	200.06	270.03	14.56	175.15	257.18	129.27	194.66
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	209.08	399.85	200.98	273.78	14.74	178.85	260.22	130.80	197.75
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	214.05	401.68	201.91	277.53	14.91	182.60	263.26	132.33	200.88
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	219.03	403.51	202.83	281.28	15.08	186.39	266.30	133.86	204.05
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	224.01	405.35	203.75	285.04	15.25	190.22	269.34	135.39	207.26
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	228.98	407.18	204.67	288.79	15.42	194.10	272.38	136.91	210.51
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	233.96	409.01	205.59	292.54	15.60	198.02	275.42	138.44	213.79
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	238.94	410.84	206.51	296.30	15.77	201.98	278.46	139.97	217.11
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	243.91	412.68	207.43	300.05	15.94	205.99	281.50	141.50	220.46
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	248.89	414.51	208.36	303.80	16.11	210.04	284.54	143.02	223.84
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	253.87	416.34	209.28	307.56	16.29	214.13	287.58	144.55	227.25
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	258.84	418.18	210.20	311.31	16.46	218.26	290.62	146.08	230.68
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	263.82	420.01	211.12	315.06	16.63	222.44	293.65	147.61	234.15
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	268.79	421.84	212.04	318.82	16.80	226.67	296.69	149.13	237.64
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	273.77	423.68	212.96	322.57	16.97	230.93	299.73	150.66	241.15
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	278.75	425.51	213.88	326.32	17.15	235.24	302.77	152.19	244.70
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	283.72	427.34	214.81	330.07	17.32	239.59	305.81	153.72	248.27
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	288.70	429.17	215.73	333.83	17.49	243.99	308.85	155.25	251.87
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	293.68	431.01	216.65	337.58	17.66	248.43	311.62	156.64	255.49
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	298.65	432.84	217.57	341.33	17.83	252.91	314.39	158.03	259.15
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	303.63	434.67	218.49	345.09	18.01	257.44	317.15	159.42	262.84
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	308.60	436.51	219.41	452.33	18.18	262.01	319.91	160.80	373.71
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	313.58	438.34	220.33	560.59	18.35	266.62	322.66	162.18	485.60

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	318.56	440.17	221.25	669.86	18.52	271.27	325.40	163.56	598.50
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	323.53	442.01	222.18	780.13	18.70	275.97	328.13	164.94	712.42
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	328.51	443.84	223.10	891.41	18.87	280.71	330.86	166.31	827.35
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	333.49	445.67	224.02	1003.69	19.04	285.50	333.58	167.68	943.29
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	338.46	447.50	224.94	1116.97	19.21	290.33	336.30	169.04	1060.23
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	343.44	449.34	225.86	1231.24	19.38	295.20	339.01	170.40	1178.18
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	348.41	451.17	226.78	1250.26	19.56	300.11	341.71	171.76	1182.29
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	353.39	453.00	227.70	1269.27	19.73	305.07	344.40	173.12	1186.43
9.8	7.8	6	0.70	0.50	0.79	35.40	35.62	98.0	39.08	363.21	3512.36	1765.51	1292.50	39.08	314.89	3512.36	1765.51	1194.80
9.9	7.9	6	0.70	0.50	0.79	35.40	35.60	99.3	39.46	373.13	3544.05	1781.44	1212.31	39.46	324.81	3544.05	1781.44	1096.11
10.0	8.0	6	0.70	0.50	0.79	35.40	35.57	100.5	39.83	383.14	3575.68	1797.34	1131.20	39.83	334.82	3575.68	1797.34	996.51
10.1	8.1	6	0.70	0.50	0.79	35.40	35.55	101.8	40.21	393.25	3607.26	1813.20	1049.16	40.21	344.93	3607.26	1813.20	896.02
10.2	8.2	6	0.70	0.50	0.79	35.40	35.53	103.0	40.59	403.45	3638.77	1829.04	966.20	40.59	355.13	3638.77	1829.04	794.62
10.3	8.3	6	0.70	0.50	0.79	35.40	35.50	104.3	40.97	413.75	3670.22	1844.85	882.31	40.97	365.43	3670.22	1844.85	692.33
10.4	8.4	6	0.70	0.50	0.79	35.40	35.48	105.6	41.35	424.14	3701.61	1860.63	797.51	41.35	375.82	3701.61	1860.63	589.15
10.5	8.5	6	0.70	0.50	0.79	35.40	35.45	106.8	41.73	434.62	3732.93	1876.38	711.78	41.73	386.31	3732.93	1876.38	485.07
10.6	8.6	7	0.35	0.50	0.40	19.00	3.50	108.1	28.00	441.66	920.32	462.60	622.06	21.44	391.69	371.20	186.59	375.58
10.7	8.7	7	0.35	0.50	0.40	19.00	3.49	109.3	28.00	448.70	922.15	463.52	702.88	21.61	397.13	373.82	187.90	473.60
10.8	8.8	7	0.35	0.50	0.40	19.00	3.49	110.6	28.00	455.74	923.98	464.44	784.44	21.79	402.60	376.44	189.22	572.36
10.9	8.9	7	0.35	0.50	0.40	19.00	3.49	111.8	28.00	462.77	925.82	465.37	866.74	21.96	408.12	379.04	190.53	671.87
11.0	9.0	7	0.35	0.50	0.40	19.00	3.48	113.1	28.00	469.81	927.65	466.29	1039.20	22.13	413.68	381.64	191.84	861.56
11.1	9.1	7	0.35	0.50	0.40	19.00	3.48	114.4	28.00	476.85	929.48	467.21	1213.06	22.30	419.29	384.24	193.14	1052.65
11.2	9.2	7	0.35	0.50	0.40	19.00	3.48	115.6	28.00	483.88	931.31	468.13	1388.31	22.47	424.94	386.82	194.44	1245.15
11.3	9.3	7	0.35	0.50	0.40	19.00	3.47	116.9	28.00	490.92	933.15	469.05	1564.96	22.65	430.63	389.40	195.73	1439.06
11.4	9.4	7	0.35	0.50	0.40	19.00	3.47	118.1	28.00	497.96	934.98	469.97	1742.98	22.82	436.36	391.97	197.03	1634.36
11.5	9.5	7	0.35	0.50	0.40	19.00	3.47	119.4	28.00	505.00	936.81	470.89	1922.40	22.99	442.14	394.53	198.31	1831.05
11.6	9.6	7	0.35	0.50	0.40	19.00	3.46	120.6	28.00	512.03	938.65	471.81	2103.19	23.16	447.96	397.09	199.60	2029.14
11.7	9.7	8	0.70	0.50	0.73	33.10	27.37	121.9	42.15	522.63	3164.36	1590.58	2288.45	42.15	458.56	3164.36	1590.58	2232.73
11.8	9.8	8	0.70	0.50	0.73	33.10	27.35	123.2	42.50	533.31	3188.01	1602.47	2399.88	42.50	469.24	3188.01	1602.47	2344.17
11.9	9.9	8	0.70	0.50	0.73	33.10	27.33	124.4	42.85	544.08	3211.61	1614.33	2512.02	42.85	480.01	3211.61	1614.33	2456.31
12.0	10.0	9	0.70	0.50	0.90	38.85	49.61	125.7	53.06	557.41	5877.27	2954.24	2627.02	53.06	493.34	5877.27	2954.24	2571.30
12.1	10.1	9	0.70	0.50	0.90	38.85	49.57	126.9	53.49	570.85	5920.35	2975.89	2653.31	53.49	506.78	5920.35	2975.89	2597.59
12.2	10.2	9	0.70	0.50	0.90	38.85	49.54	128.2	53.91	584.40	5963.33	2997.50	2679.65	53.91	520.33	5963.33	2997.50	2623.94
12.3	10.3	9	0.70	0.50	0.90	38.85	49.50	129.4	54.34	598.06	6006.22	3019.05	2706.05	54.34	533.99	6006.22	3019.05	2650.34
12.4	10.4	9	0.70	0.50	0.90	38.85	49.46	130.7	54.77	611.83	6049.00	3040.56	2732.50	54.77	547.76	6049.00	3040.56	2676.79
12.5	10.5	9	0.70	0.50	0.90	38.85	49.43	131.9	55.19	625.70	6091.69	3062.02	2659.78	55.19	561.63	6091.69	3062.02	2604.07
12.6	10.6	9	0.70	0.50	0.90	38.85	49.39	133.2	55.62	639.68	6134.28	3083.42	2586.47	55.62	575.61	6134.28	3083.42	2530.76
12.7	10.7	9	0.70	0.50	0.90	38.85	49.35	134.5	56.05	653.76	6176.77	3104.78	2512.58	56.05	589.69	6176.77	3104.78	2456.86
12.8	10.8	9	0.70	0.50	0.90	38.85	49.32	135.7	56.48	667.96	6219.15	3126.09	2438.10	56.48	603.89	6219.15	3126.09	2382.39
12.9	10.9	9	0.70	0.50	0.90	38.85	49.28	137.0	56.90	682.26	6261.44	3147.34	2363.04	56.90	618.19	6261.44	3147.34	2307.32
13.0	11.0	9	0.70	0.50	0.90	38.85	49.24	138.2	57.33	696.67	6303.62	3168.54	2287.39	57.33	632.60	6303.62	3168.54	2231.68
13.1	11.1	9	0.70	0.50	0.90	38.85	49.20	139.5	57.76	711.18	6345.69	3189.69	2211.17	57.76	647.11	6345.69	3189.69	2155.46
13.2	11.2	9	0.70	0.50	0.90	38.85	49.16	140.7	58.18	725.81	6387.67	3210.79	2134.37	58.18	661.74	6387.67	3210.79	2078.65
13.3	11.3	9	0.70	0.50	0.90	38.85	49.13	142.0	58.61	740.54	6429.53	3231.84	2056.98	58.61	676.47	6429.53	3231.84	2001.27
13.4	11.4	9	0.70	0.50	0.90	38.85	49.09	143.3	59.04	755.38	6471.30	3252.83	1979.03	59.04	691.31	6471.30	3252.83	1923.31
13.5	11.5	10	0.70	0.50	0.73	33.10	26.97	144.5	48.41	767.54	3581.31	1800.16	1898.08	48.41	703.47	3581.31	1800.16	1842.37
13.6	11.6	10	0.70	0.50	0.73	33.10	26.95	145.8	48.76	779.80	3603.91	1811.52	1996.93	48.76	715.73	3603.91	1811.52	1941.21

13.7	11.7	10	0.70	0.50	0.73	33.10	26.92	147.0	49.11	792.14	3626.44	1822.85	2096.30	49.11	728.07	3626.44	1822.85	2040.59
13.8	11.8	10	0.70	0.50	0.73	33.10	26.90	148.3	49.46	804.57	3648.91	1834.14	2196.21	49.46	740.50	3648.91	1834.14	2140.49
13.9	11.9	10	0.70	0.50	0.73	33.10	26.88	149.5	49.81	817.09	3671.31	1845.40	2296.71	49.81	753.02	3671.31	1845.40	2241.00
14.0	12.0	10	0.70	0.50	0.73	33.10	26.85	150.8	50.15	829.69	3693.65	1856.63	2397.83	50.15	765.62	3693.65	1856.63	2342.11
14.1	12.1	10	0.70	0.50	0.73	33.10	26.83	152.1	50.50	842.39	3715.93	1867.83	2499.55	50.50	778.32	3715.93	1867.83	2443.83
14.2	12.2	10	0.70	0.50	0.73	33.10	26.80	153.3	50.85	855.17	3738.14	1878.99	2601.87	50.85	791.10	3738.14	1878.99	2546.16
14.3	12.3	10	0.70	0.50	0.73	33.10	26.78	154.6	51.20	868.03	3760.28	1890.12	2704.81	51.20	803.96	3760.28	1890.12	2649.10
14.4	12.4	10	0.70	0.50	0.73	33.10	26.75	155.8	51.55	880.99	3782.36	1901.22	2808.35	51.55	816.92	3782.36	1901.22	2752.64
14.5	12.5	10	0.70	0.50	0.73	33.10	26.73	157.1	51.89	894.03	3804.37	1912.29	2912.51	51.89	829.96	3804.37	1912.29	2856.79
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	909.52	6223.90	3128.47	3019.32	61.62	845.45	6223.90	3128.47	2963.61
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	925.11	6259.84	3146.54	3045.61	62.03	861.04	6259.84	3146.54	2989.89
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	940.80	6295.68	3164.55	3072.04	62.44	876.73	6295.68	3164.55	3016.33
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	956.60	6333.77	3183.70	3098.63	62.85	892.53	6333.77	3183.70	3042.91
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	972.50	6371.82	3202.83	3125.29	63.26	908.43	6371.82	3202.83	3069.57
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	988.50	6409.83	3221.93	3152.02	63.67	924.43	6409.83	3221.93	3096.31
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	1004.60	6447.80	3241.02	3178.83	64.08	940.53	6447.80	3241.02	3123.12
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	1020.81	6485.73	3260.09	3116.26	64.49	956.74	6485.73	3260.09	3060.54
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	1037.12	6523.62	3279.13	3053.27	64.90	973.05	6523.62	3279.13	2997.56
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	1053.54	6561.47	3298.15	2989.87	65.31	989.47	6561.47	3298.15	2934.16
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	1070.06	6599.28	3317.16	2926.07	65.72	1005.99	6599.28	3317.16	2870.35
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	1086.68	6637.04	3336.14	2861.85	66.13	1022.61	6637.04	3336.14	2806.14
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	1103.40	6674.77	3355.10	2797.22	66.54	1039.33	6674.77	3355.10	2741.51
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	1120.23	6712.45	3374.05	2732.19	66.95	1056.16	6712.45	3374.05	2676.48
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	1137.16	6750.09	3392.97	2666.75	67.36	1073.09	6750.09	3392.97	2611.03
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	1154.19	6787.70	3411.87	2600.90	67.77	1090.12	6787.70	3411.87	2545.18
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	1171.33	6825.26	3430.75	2534.64	68.18	1107.26	6825.26	3430.75	2478.93
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.15	1185.95	4219.86	2121.13	2559.99	58.15	1121.88	4219.86	2121.13	2504.28
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.50	1200.65	4242.99	2132.76	2674.86	58.50	1136.58	4242.99	2132.76	2619.14
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	58.85	1215.44	4266.10	2144.38	2790.27	58.85	1151.37	4266.10	2144.38	2734.56
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.20	1230.32	4289.18	2155.98	2906.23	59.20	1166.25	4289.18	2155.98	2850.52
16.7	14.7	12	0.70	0.50	0.73	33.10	26.40	184.7	59.55	1245.28	4312.24	2167.57	3022.74	59.55	1181.21	4312.24	2167.57	2967.03
16.8	14.8	12	0.70	0.50	0.73	33.10	26.39	186.0	59.89	1260.34	4335.28	2179.15	3139.79	59.89	1196.27	4335.28	2179.15	3084.08
16.9	14.9	12	0.70	0.50	0.73	33.10	26.38	187.2	60.24	1275.48	4358.29	2190.71	3257.39	60.24	1211.41	4358.29	2190.71	3201.68
17.0	15.0	12	0.70	0.50	0.73	33.10	26.37	188.5	60.59	1290.70	4381.27	2202.27	3375.53	60.59	1226.63	4381.27	2202.27	3319.82

1.1.5.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ	inserisci stato di addensamento
1	**0.0**	**3.3**	**19.35**			0.70	0.50	0.00	Sciolto
2	**2.5**	**4.4**	**19.35**			0.70	0.50	0.00	Sciolto
3	**4.4**	**5.2**	**18.33**	**22**	**30**	0.66	0.50	0.40	Sciolto
4	**5.2**	**5.9**	**19.35**			0.70	0.50	0.00	Sciolto
5	**5.9**	**9.7**	**18.33**	**22**	**30**	0.66	0.50	0.40	Sciolto
6	**9.7**	**10.5**	**19.35**	**38**		0.70	0.50	0.79	Sciolto
7	**10.5**	**11.6**	**18.33**	**22**	**80**	0.35	0.50	0.40	Sciolto
8	**11.6**	**11.9**	**19.35**			0.70	0.50	0.00	Sciolto
9	**11.9**	**13.4**	**19.35**	**42**		0.70	0.50	0.90	Sciolto
10	**13.4**	**14.5**	**19.35**			0.70	0.50	0.00	Sciolto
11	**14.5**	**16.2**	**19.35**	**41**		0.70	0.50	0.86	Sciolto
12	**16.2**	**17.2**	**19.35**			0.70	0.50	0.00	Sciolto
13	**17.2**	**19.8**	**19.35**	**41**		0.70	0.50	0.86	Sciolto
14	**19.8**	**26.0**	**19.35**			0.70	0.50	0.00	Sciolto
15	**26.0**	**29.6**	**18.33**	**22**	**150**	0.35	0.50	0.40	Sciolto

1.1.5.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5362	-

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	-2.83
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	-5.65
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	-8.48
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	-14.14
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	-16.96
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	-19.79
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	-22.62
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	-25.45
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	-28.27
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	-31.10
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	-33.93
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	-36.76
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	-39.58
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	-15.22
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	9.27
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	33.91
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	58.69
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	83.61
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	108.67
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	133.86
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	62.2	0.00	0.00	0.00	0.00	159.20

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	65.0	0.00	0.00	0.00	0.00	156.37
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	67.9	0.00	0.00	0.00	0.00	153.55
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	70.7	19.80	7.46	356.97	403.73	157.21
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	73.5	19.80	14.93	358.81	405.80	133.69
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	76.3	19.80	22.39	360.64	407.87	110.02
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	79.2	19.80	29.86	362.47	409.95	86.22
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	82.0	19.80	37.32	364.31	412.02	62.28
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	84.8	19.80	44.79	366.14	414.09	67.53
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	87.7	19.80	52.25	367.97	416.17	72.78
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	90.5	19.80	59.72	369.80	418.24	78.04
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	59.72	0.00	0.00	76.80
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	59.72	0.00	0.00	103.87
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	59.72	0.00	0.00	131.07
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	59.72	0.00	0.00	158.42
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	59.72	0.00	0.00	185.90
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	59.72	0.00	0.00	213.53
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	59.72	0.00	0.00	241.29
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	67.18	385.18	435.63	275.69
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	74.64	387.02	437.70	280.89
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	82.11	388.85	439.78	286.09
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	89.57	390.68	441.85	291.28
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	97.04	392.51	443.92	296.48
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	104.50	394.35	446.00	301.68
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	111.97	396.18	448.07	306.88
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	119.43	398.01	450.14	312.08
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	126.90	399.85	452.22	317.28
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	134.36	401.68	454.29	322.48
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	141.82	403.51	456.36	327.68
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	149.29	405.35	458.43	332.88
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	156.75	407.18	460.51	338.08
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	164.22	409.01	462.58	343.27
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	171.68	410.84	464.65	348.47
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	179.15	412.68	466.73	353.67
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	186.61	414.51	468.80	358.87
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	194.08	416.34	470.87	364.07
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	201.54	418.18	472.95	369.27
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	209.00	420.01	475.02	374.47
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	216.47	421.84	477.09	379.67
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	223.93	423.68	479.17	384.87
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	231.40	425.51	481.24	390.06
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	238.86	427.34	483.31	395.26
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	246.33	429.17	485.38	400.46
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	253.79	431.01	487.46	405.66
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	261.25	432.84	489.53	410.86
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	268.72	434.67	491.60	416.06
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	276.18	436.51	493.68	656.41
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	283.65	438.34	495.75	899.24

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	291.11	440.17	497.82	1144.53
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	298.58	442.01	499.90	1392.30
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	306.04	443.84	501.97	1642.53
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	313.51	445.67	504.04	1895.24
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	320.97	447.50	506.12	2150.42
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	328.43	449.34	508.19	2408.07
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	335.90	451.17	510.26	2447.60
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	343.36	453.00	512.33	2487.13
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	220.5	39.08	358.10	3542.49	4006.46	2532.98
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	223.4	39.46	372.97	3576.76	4045.22	2343.81
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	226.2	39.83	387.99	3611.03	4083.98	2152.28
10.1	8.1	6	0.70	0.50	0.79	35.40	35.92	229.0	40.21	403.15	3645.30	4122.74	1958.41
10.2	8.2	6	0.70	0.50	0.79	35.40	35.92	231.8	40.59	418.45	3679.57	4161.50	1762.19
10.3	8.3	6	0.70	0.50	0.79	35.40	35.92	234.7	40.97	433.90	3713.85	4200.26	1563.63
10.4	8.4	6	0.70	0.50	0.79	35.40	35.92	237.5	41.35	449.48	3748.12	4239.02	1362.72
10.5	8.5	6	0.70	0.50	0.79	35.40	35.92	240.3	41.73	465.21	3782.39	4277.78	1159.46
10.6	8.6	7	0.35	0.50	0.40	19.00	3.57	243.2	28.00	475.77	920.32	1040.85	949.23
10.7	8.7	7	0.35	0.50	0.40	19.00	3.57	246.0	28.00	486.32	922.15	1042.93	885.49
10.8	8.8	7	0.35	0.50	0.40	19.00	3.57	248.8	28.00	496.88	923.98	1045.00	821.61
10.9	8.9	7	0.35	0.50	0.40	19.00	3.57	251.6	28.00	507.44	925.82	1047.07	757.59
11.0	9.0	7	0.35	0.50	0.40	19.00	3.57	254.5	28.00	517.99	927.65	1049.15	1150.54
11.1	9.1	7	0.35	0.50	0.40	19.00	3.57	257.3	28.00	528.55	929.48	1051.22	1546.86
11.2	9.2	7	0.35	0.50	0.40	19.00	3.57	260.1	28.00	539.10	931.31	1053.29	1946.55
11.3	9.3	7	0.35	0.50	0.40	19.00	3.57	263.0	28.00	549.66	933.15	1055.36	2349.60
11.4	9.4	7	0.35	0.50	0.40	19.00	3.57	265.8	28.00	560.21	934.98	1057.44	2756.02
11.5	9.5	7	0.35	0.50	0.40	19.00	3.57	268.6	28.00	570.77	936.81	1059.51	3165.79
11.6	9.6	7	0.35	0.50	0.40	19.00	3.57	271.4	28.00	581.33	938.65	1061.58	3578.92
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	274.3	0.00	581.33	0.00	0.00	3986.21
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	277.1	0.00	581.33	0.00	0.00	4468.48
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	279.9	0.00	581.33	0.00	0.00	4954.24
12.0	10.0	9	0.70	0.50	0.90	38.85	50.66	282.7	53.06	601.33	6001.94	6788.03	5460.86
12.1	10.1	9	0.70	0.50	0.90	38.85	50.64	285.6	53.49	621.49	6048.05	6840.18	5513.99
12.2	10.2	9	0.70	0.50	0.90	38.85	50.62	288.4	53.91	641.82	6094.11	6892.27	5567.22
12.3	10.3	9	0.70	0.50	0.90	38.85	50.60	291.2	54.34	662.30	6140.12	6944.31	5620.55
12.4	10.4	9	0.70	0.50	0.90	38.85	50.58	294.1	54.77	682.95	6186.09	6996.30	5673.98
12.5	10.5	9	0.70	0.50	0.90	38.85	50.57	296.9	55.19	703.76	6232.00	7048.23	5218.12
12.6	10.6	9	0.70	0.50	0.90	38.85	50.55	299.7	55.62	724.73	6277.87	7100.11	4758.90
12.7	10.7	9	0.70	0.50	0.90	38.85	50.53	302.5	56.05	745.85	6323.69	7151.93	4296.32
12.8	10.8	9	0.70	0.50	0.90	38.85	50.51	305.4	56.48	767.15	6369.47	7203.70	3830.40
12.9	10.9	9	0.70	0.50	0.90	38.85	50.49	308.2	56.90	788.60	6415.19	7255.41	3361.12
13.0	11.0	9	0.70	0.50	0.90	38.85	50.47	311.0	57.33	810.21	6460.86	7307.06	2888.51
13.1	11.1	9	0.70	0.50	0.90	38.85	50.45	313.8	57.76	831.98	6506.48	7358.66	2412.56
13.2	11.2	9	0.70	0.50	0.90	38.85	50.43	316.7	58.18	853.92	6552.06	7410.20	1933.27
13.3	11.3	9	0.70	0.50	0.90	38.85	50.41	319.5	58.61	876.02	6597.58	7461.69	1450.66
13.4	11.4	9	0.70	0.50	0.90	38.85	50.39	322.3	59.04	898.27	6643.05	7513.11	964.71
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	325.2	0.00	898.27	0.00	0.00	455.95
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	328.0	0.00	898.27	0.00	0.00	942.43

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	330.8	0.00	898.27	0.00	0.00	1431.96
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	333.6	0.00	898.27	0.00	0.00	1924.53
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	336.5	0.00	898.27	0.00	0.00	2420.13
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	339.3	0.00	898.27	0.00	0.00	2918.77
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	342.1	0.00	898.27	0.00	0.00	3420.44
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	344.9	0.00	898.27	0.00	0.00	3925.14
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	347.8	0.00	898.27	0.00	0.00	4432.85
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	350.6	0.00	898.27	0.00	0.00	4943.59
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	353.4	0.00	898.27	0.00	0.00	5457.34
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	921.50	6424.74	7266.21	5994.31
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	944.89	6464.73	7311.44	6045.10
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	968.43	6504.67	7356.61	6095.99
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	992.12	6544.56	7401.73	6146.97
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1015.97	6584.40	7446.78	6198.04
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1039.98	6624.19	7491.78	6249.20
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1064.13	6663.93	7536.72	6300.45
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1088.45	6703.61	7581.61	5811.24
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1112.91	6743.25	7626.43	5319.14
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1137.54	6782.83	7671.20	4824.16
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1162.31	6822.36	7715.90	4326.30
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1187.24	6861.83	7760.55	3825.56
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1212.33	6901.26	7805.14	3321.95
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1237.57	6940.63	7849.66	2815.47
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1262.97	6979.94	7894.13	2306.13
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1288.52	7019.21	7938.54	1793.93
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1314.22	7058.42	7982.88	1278.88
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1314.22	0.00	0.00	1308.62
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1314.22	0.00	0.00	1878.86
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1314.22	0.00	0.00	2452.04
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1314.22	0.00	0.00	3028.14
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	415.6	0.00	1314.22	0.00	0.00	3607.16
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	418.5	0.00	1314.22	0.00	0.00	4189.10
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1314.22	0.00	0.00	4773.95
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1314.22	0.00	0.00	5361.71

1.1.5.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3828	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	-1.96
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	-3.93
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	-5.89
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	-7.85
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	-9.82
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	-11.78
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	-13.74
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	-15.71
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	-17.67
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	-19.63
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	-21.60
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	-23.56
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	-25.53
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	-27.49
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	-10.57
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	6.44
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	23.55
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	40.76
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	58.06
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	75.46
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	92.96
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	43.2	0.00	0.00	0.00	0.00	110.56

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	108.59
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	47.1	0.00	0.00	0.00	0.00	106.63
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	49.1	19.80	6.22	356.97	280.37	110.07
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	51.1	19.80	12.44	358.81	281.81	94.64
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	53.0	19.80	18.66	360.64	283.25	79.11
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	55.0	19.80	24.88	362.47	284.68	63.48
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	56.9	19.80	31.10	364.31	286.12	47.76
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	58.9	19.80	37.32	366.14	287.56	52.31
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	60.9	19.80	43.54	367.97	289.00	56.86
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	62.8	19.80	49.76	369.80	290.44	61.40
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	49.76	0.00	0.00	60.55
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	49.76	0.00	0.00	79.34
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	49.76	0.00	0.00	98.23
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	49.76	0.00	0.00	117.22
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	49.76	0.00	0.00	136.31
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	49.76	0.00	0.00	155.50
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	49.76	0.00	0.00	174.78
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	55.98	385.18	302.52	199.56
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	62.20	387.02	303.96	204.07
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	68.42	388.85	305.40	208.59
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	74.64	390.68	306.84	213.10
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	80.86	392.51	308.28	217.61
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	87.08	394.35	309.72	222.12
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	93.31	396.18	311.16	226.63
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	99.53	398.01	312.60	231.15
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	105.75	399.85	314.04	235.66
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	111.97	401.68	315.48	240.17
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	118.19	403.51	316.92	244.68
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	124.41	405.35	318.36	249.19
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	130.63	407.18	319.80	253.71
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	136.85	409.01	321.24	258.22
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	143.07	410.84	322.68	262.73
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	149.29	412.68	324.12	267.24
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	155.51	414.51	325.56	271.75
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	161.73	416.34	327.00	276.27
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	167.95	418.18	328.43	280.78
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	174.17	420.01	329.87	285.29
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	180.39	421.84	331.31	289.80
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	186.61	423.68	332.75	294.31
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	192.83	425.51	334.19	298.82
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	199.05	427.34	335.63	303.34
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	205.27	429.17	337.07	307.85
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	211.49	431.01	338.51	312.36
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	217.71	432.84	339.95	316.87
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	223.93	434.67	341.39	321.38
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	230.15	436.51	342.83	489.20
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	236.37	438.34	344.27	658.73

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	242.59	440.17	345.71	829.97
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	248.81	442.01	347.15	1002.84
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	255.03	443.84	348.59	1177.34
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	261.25	445.67	350.03	1353.46
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	267.48	447.50	351.47	1531.20
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	273.70	449.34	352.91	1710.55
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	279.92	451.17	354.35	1738.90
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	286.14	453.00	355.79	1767.26
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	153.2	39.08	298.41	3542.49	2782.26	1800.88
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	155.1	39.46	310.81	3576.76	2809.18	1671.30
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	157.1	39.83	323.32	3611.03	2836.10	1540.11
10.1	8.1	6	0.70	0.50	0.79	35.40	35.91	159.0	40.21	335.96	3643.61	2861.69	1407.31
10.2	8.2	6	0.70	0.50	0.79	35.40	35.89	161.0	40.59	348.71	3676.15	2887.24	1272.99
10.3	8.3	6	0.70	0.50	0.79	35.40	35.87	163.0	40.97	361.58	3708.65	2912.77	1137.14
10.4	8.4	6	0.70	0.50	0.79	35.40	35.86	164.9	41.35	374.57	3741.11	2938.26	999.78
10.5	8.5	6	0.70	0.50	0.79	35.40	35.84	166.9	41.73	387.68	3773.52	2963.72	860.90
10.6	8.6	7	0.35	0.50	0.40	19.00	3.55	168.9	28.00	396.47	920.32	722.81	716.65
10.7	8.7	7	0.35	0.50	0.40	19.00	3.55	170.8	28.00	405.27	922.15	724.25	673.66
10.8	8.8	7	0.35	0.50	0.40	19.00	3.55	172.8	28.00	414.07	923.98	725.69	630.57
10.9	8.9	7	0.35	0.50	0.40	19.00	3.55	174.8	28.00	422.86	925.82	727.13	587.39
11.0	9.0	7	0.35	0.50	0.40	19.00	3.54	176.7	28.00	431.66	927.65	728.57	859.10
11.1	9.1	7	0.35	0.50	0.40	19.00	3.54	178.7	28.00	440.46	929.48	730.01	1133.09
11.2	9.2	7	0.35	0.50	0.40	19.00	3.54	180.6	28.00	449.25	931.31	731.45	1409.36
11.3	9.3	7	0.35	0.50	0.40	19.00	3.54	182.6	28.00	458.05	933.15	732.89	1687.91
11.4	9.4	7	0.35	0.50	0.40	19.00	3.53	184.6	28.00	466.85	934.98	734.33	1968.73
11.5	9.5	7	0.35	0.50	0.40	19.00	3.53	186.5	28.00	475.64	936.81	735.77	2251.82
11.6	9.6	7	0.35	0.50	0.40	19.00	3.53	188.5	28.00	484.44	938.65	737.21	2537.18
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	190.5	0.00	484.44	0.00	0.00	2817.15
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	192.4	0.00	484.44	0.00	0.00	3149.12
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	194.4	0.00	484.44	0.00	0.00	3483.44
12.0	10.0	9	0.70	0.50	0.90	38.85	50.27	196.3	53.06	501.11	5955.66	4677.57	3834.61
12.1	10.1	9	0.70	0.50	0.90	38.85	50.24	198.3	53.49	517.91	6000.67	4712.92	3873.25
12.2	10.2	9	0.70	0.50	0.90	38.85	50.22	200.3	53.91	534.85	6045.61	4748.21	3911.97
12.3	10.3	9	0.70	0.50	0.90	38.85	50.19	202.2	54.34	551.92	6090.49	4783.46	3950.76
12.4	10.4	9	0.70	0.50	0.90	38.85	50.17	204.2	54.77	569.12	6135.30	4818.66	3989.63
12.5	10.5	9	0.70	0.50	0.90	38.85	50.14	206.2	55.19	586.46	6180.05	4853.80	3678.26
12.6	10.6	9	0.70	0.50	0.90	38.85	50.12	208.1	55.62	603.94	6224.73	4888.89	3364.64
12.7	10.7	9	0.70	0.50	0.90	38.85	50.09	210.1	56.05	621.55	6269.34	4923.93	3048.77
12.8	10.8	9	0.70	0.50	0.90	38.85	50.07	212.1	56.48	639.29	6313.89	4958.91	2730.65
12.9	10.9	9	0.70	0.50	0.90	38.85	50.04	214.0	56.90	657.16	6358.36	4993.85	2410.30
13.0	11.0	9	0.70	0.50	0.90	38.85	50.02	216.0	57.33	675.18	6402.77	5028.73	2087.71
13.1	11.1	9	0.70	0.50	0.90	38.85	49.99	217.9	57.76	693.32	6447.11	5063.55	1762.89
13.2	11.2	9	0.70	0.50	0.90	38.85	49.96	219.9	58.18	711.60	6491.39	5098.32	1435.84
13.3	11.3	9	0.70	0.50	0.90	38.85	49.94	221.9	58.61	730.01	6535.59	5133.04	1106.57
13.4	11.4	9	0.70	0.50	0.90	38.85	49.91	223.8	59.04	748.56	6579.72	5167.70	775.08
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	225.8	0.00	748.56	0.00	0.00	425.12
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	227.8	0.00	748.56	0.00	0.00	759.05

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	229.7	0.00	748.56	0.00	0.00	1095.02
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	231.7	0.00	748.56	0.00	0.00	1433.02
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	233.7	0.00	748.56	0.00	0.00	1773.05
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	235.6	0.00	748.56	0.00	0.00	2115.11
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	237.6	0.00	748.56	0.00	0.00	2459.19
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	239.5	0.00	748.56	0.00	0.00	2805.30
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	241.5	0.00	748.56	0.00	0.00	3153.41
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	243.5	0.00	748.56	0.00	0.00	3503.54
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	245.4	0.00	748.56	0.00	0.00	3855.68
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	767.92	6350.93	4988.01	4226.66
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	787.41	6389.47	5018.28	4263.85
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	807.02	6427.93	5048.49	4301.12
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	826.77	6466.33	5078.64	4338.45
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	846.64	6504.65	5108.74	4375.86
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	866.65	6542.91	5138.79	4413.33
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	886.78	6581.09	5168.78	4450.87
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	907.04	6619.20	5198.71	4118.46
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	927.43	6657.24	5228.58	3784.15
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	947.95	6695.20	5258.40	3447.93
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	968.59	6733.10	5288.16	3109.82
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	989.37	6770.92	5317.87	2769.82
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1010.28	6808.66	5347.51	2427.93
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1031.31	6846.33	5377.10	2084.16
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1052.47	6883.93	5406.63	1738.50
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1073.77	6921.45	5436.10	1390.97
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1095.19	6958.90	5465.51	1041.57
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1095.19	0.00	0.00	1061.12
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1095.19	0.00	0.00	1450.64
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1095.19	0.00	0.00	1842.10
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1095.19	0.00	0.00	2235.48
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	288.6	0.00	1095.19	0.00	0.00	2630.77
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	290.6	0.00	1095.19	0.00	0.00	3027.98
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1095.19	0.00	0.00	3427.09
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1095.19	0.00	0.00	3828.11

1.1.5.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1.0**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	2568	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	-1.26
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	-2.51
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	-3.77
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	-5.03
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	-6.28
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	-7.54
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	-8.80
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	-10.05
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	-12.57
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	-13.82
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	-15.08
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	-16.34
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	-17.59
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	-6.77
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	4.12
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	15.07
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	26.09
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	37.16
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	48.30
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	59.50
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	27.6	0.00	0.00	0.00	0.00	70.76

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	28.9	0.00	0.00	0.00	0.00	69.50
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	30.2	0.00	0.00	0.00	0.00	68.24
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	31.4	19.80	4.98	356.97	179.43	71.31
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	32.7	19.80	9.95	358.81	180.36	62.30
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	33.9	19.80	14.93	360.64	181.28	53.23
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	35.2	19.80	19.91	362.47	182.20	44.09
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	36.4	19.80	24.88	364.31	183.12	34.89
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	37.7	19.80	29.86	366.14	184.04	38.67
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	39.0	19.80	34.83	367.97	184.96	42.45
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	40.2	19.80	39.81	369.80	185.88	46.22
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	39.81	0.00	0.00	45.67
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	39.81	0.00	0.00	57.70
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	39.81	0.00	0.00	69.79
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	39.81	0.00	0.00	81.95
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	39.81	0.00	0.00	94.16
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	39.81	0.00	0.00	106.44
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	39.81	0.00	0.00	118.78
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	44.79	385.18	193.61	135.51
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	49.76	387.02	194.53	139.26
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	54.74	388.85	195.46	143.02
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	59.72	390.68	196.38	146.77
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	64.69	392.51	197.30	150.52
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	69.67	394.35	198.22	154.27
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	74.64	396.18	199.14	158.03
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	79.62	398.01	200.06	161.78
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	84.60	399.85	200.98	165.53
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	89.57	401.68	201.91	169.29
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	94.55	403.51	202.83	173.04
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	99.53	405.35	203.75	176.79
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	104.50	407.18	204.67	180.55
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	109.48	409.01	205.59	184.30
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	114.45	410.84	206.51	188.05
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	119.43	412.68	207.43	191.81
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	124.41	414.51	208.36	195.56
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	129.38	416.34	209.28	199.31
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	134.36	418.18	210.20	203.06
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	139.34	420.01	211.12	206.82
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	144.31	421.84	212.04	210.57
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	149.29	423.68	212.96	214.32
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	154.26	425.51	213.88	218.08
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	159.24	427.34	214.81	221.83
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	164.22	429.17	215.73	225.58
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	169.19	431.01	216.65	229.34
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	174.17	432.84	217.57	233.09
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	179.15	434.67	218.49	236.84
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	184.12	436.51	219.41	344.09
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	189.10	438.34	220.33	452.35

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	194.08	440.17	221.25	561.61
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	199.05	442.01	222.18	671.88
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	204.03	443.84	223.10	783.16
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	209.00	445.67	224.02	895.44
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	213.98	447.50	224.94	1008.72
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	218.96	449.34	225.86	1123.00
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	223.93	451.17	226.78	1142.01
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	228.91	453.00	227.70	1161.03
9.8	7.8	6	0.70	0.50	0.79	35.40	35.62	98.0	39.08	238.73	3512.36	1765.51	1184.25
9.9	7.9	6	0.70	0.50	0.79	35.40	35.60	99.3	39.46	248.65	3544.05	1781.44	1104.07
10.0	8.0	6	0.70	0.50	0.79	35.40	35.57	100.5	39.83	258.66	3575.68	1797.34	1022.95
10.1	8.1	6	0.70	0.50	0.79	35.40	35.55	101.8	40.21	268.77	3607.26	1813.20	940.91
10.2	8.2	6	0.70	0.50	0.79	35.40	35.53	103.0	40.59	278.97	3638.77	1829.04	857.95
10.3	8.3	6	0.70	0.50	0.79	35.40	35.50	104.3	40.97	289.26	3670.22	1844.85	774.07
10.4	8.4	6	0.70	0.50	0.79	35.40	35.48	105.6	41.35	299.66	3701.61	1860.63	689.26
10.5	8.5	6	0.70	0.50	0.79	35.40	35.45	106.8	41.73	310.14	3732.93	1876.38	603.54
10.6	8.6	7	0.35	0.50	0.40	19.00	3.50	108.1	28.00	317.18	920.32	462.60	513.82
10.7	8.7	7	0.35	0.50	0.40	19.00	3.49	109.3	28.00	324.22	922.15	463.52	487.53
10.8	8.8	7	0.35	0.50	0.40	19.00	3.49	110.6	28.00	331.25	923.98	464.44	461.18
10.9	8.9	7	0.35	0.50	0.40	19.00	3.49	111.8	28.00	338.29	925.82	465.37	434.76
11.0	9.0	7	0.35	0.50	0.40	19.00	3.48	113.1	28.00	345.33	927.65	466.29	607.23
11.1	9.1	7	0.35	0.50	0.40	19.00	3.48	114.4	28.00	352.36	929.48	467.21	781.09
11.2	9.2	7	0.35	0.50	0.40	19.00	3.48	115.6	28.00	359.40	931.31	468.13	956.34
11.3	9.3	7	0.35	0.50	0.40	19.00	3.47	116.9	28.00	366.44	933.15	469.05	1132.98
11.4	9.4	7	0.35	0.50	0.40	19.00	3.47	118.1	28.00	373.48	934.98	469.97	1311.01
11.5	9.5	7	0.35	0.50	0.40	19.00	3.47	119.4	28.00	380.51	936.81	470.89	1490.42
11.6	9.6	7	0.35	0.50	0.40	19.00	3.46	120.6	28.00	387.55	938.65	471.81	1671.21
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	121.9	0.00	387.55	0.00	0.00	1847.26
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	123.2	0.00	387.55	0.00	0.00	2056.51
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	124.4	0.00	387.55	0.00	0.00	2267.20
12.0	10.0	9	0.70	0.50	0.90	38.85	49.61	125.7	53.06	400.89	5877.27	2954.24	2490.91
12.1	10.1	9	0.70	0.50	0.90	38.85	49.57	126.9	53.49	414.33	5920.35	2975.89	2517.20
12.2	10.2	9	0.70	0.50	0.90	38.85	49.54	128.2	53.91	427.88	5963.33	2997.50	2543.54
12.3	10.3	9	0.70	0.50	0.90	38.85	49.50	129.4	54.34	441.53	6006.22	3019.05	2569.94
12.4	10.4	9	0.70	0.50	0.90	38.85	49.46	130.7	54.77	455.30	6049.00	3040.56	2596.39
12.5	10.5	9	0.70	0.50	0.90	38.85	49.43	131.9	55.19	469.17	6091.69	3062.02	2402.45
12.6	10.6	9	0.70	0.50	0.90	38.85	49.39	133.2	55.62	483.15	6134.28	3083.42	2207.15
12.7	10.7	9	0.70	0.50	0.90	38.85	49.35	134.5	56.05	497.24	6176.77	3104.78	2010.51
12.8	10.8	9	0.70	0.50	0.90	38.85	49.32	135.7	56.48	511.43	6219.15	3126.09	1812.52
12.9	10.9	9	0.70	0.50	0.90	38.85	49.28	137.0	56.90	525.73	6261.44	3147.34	1613.18
13.0	11.0	9	0.70	0.50	0.90	38.85	49.24	138.2	57.33	540.14	6303.62	3168.54	1412.51
13.1	11.1	9	0.70	0.50	0.90	38.85	49.20	139.5	57.76	554.66	6345.69	3189.69	1210.51
13.2	11.2	9	0.70	0.50	0.90	38.85	49.16	140.7	58.18	569.28	6387.67	3210.79	1007.18
13.3	11.3	9	0.70	0.50	0.90	38.85	49.13	142.0	58.61	584.01	6429.53	3231.84	802.51
13.4	11.4	9	0.70	0.50	0.90	38.85	49.09	143.3	59.04	598.85	6471.30	3252.83	596.53
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	144.5	0.00	598.85	0.00	0.00	376.23
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	145.8	0.00	598.85	0.00	0.00	585.64

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	147.0	0.00	598.85	0.00	0.00	796.27
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	148.3	0.00	598.85	0.00	0.00	1008.12
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	149.5	0.00	598.85	0.00	0.00	1221.25
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	150.8	0.00	598.85	0.00	0.00	1435.67
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	152.1	0.00	598.85	0.00	0.00	1651.38
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	153.3	0.00	598.85	0.00	0.00	1868.37
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	154.6	0.00	598.85	0.00	0.00	2086.65
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	155.8	0.00	598.85	0.00	0.00	2306.21
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	157.1	0.00	598.85	0.00	0.00	2527.05
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	614.34	6223.90	3128.47	2762.64
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	629.93	6259.84	3146.54	2788.93
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	645.62	6295.68	3164.55	2815.36
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	661.42	6333.77	3183.70	2841.95
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	677.31	6371.82	3202.83	2868.61
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	693.32	6409.83	3221.93	2895.34
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	709.42	6447.80	3241.02	2922.15
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	725.63	6485.73	3260.09	2716.74
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	741.94	6523.62	3279.13	2510.13
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	758.36	6561.47	3298.15	2302.33
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	774.88	6599.28	3317.16	2093.34
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	791.50	6637.04	3336.14	1883.16
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	808.22	6674.77	3355.10	1671.79
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	825.05	6712.45	3374.05	1459.23
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	841.98	6750.09	3392.97	1245.49
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	859.01	6787.70	3411.87	1030.56
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	876.15	6825.26	3430.75	814.45
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	876.15	0.00	0.00	827.09
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	876.15	0.00	0.00	1072.01
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	876.15	0.00	0.00	1318.19
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	876.15	0.00	0.00	1565.61
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	184.7	0.00	876.15	0.00	0.00	1814.29
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	186.0	0.00	876.15	0.00	0.00	2064.22
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	187.2	0.00	876.15	0.00	0.00	2315.39
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	188.5	0.00	876.15	0.00	0.00	2567.81

1.1.6 Calcolo del carico limite con riferimento alla prova CPTu2bis

1.1.6.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	1.6	19.35	35		0.70	0.50	0.70
2	1.6	2.0	18.33	22	35	0.62	0.50	0.40
3	2.0	3.5	19.35	35		0.70	0.50	0.70
4	3.5	4.2	19.35	40		0.70	0.50	0.83
5	4.2	4.8	18.33	22	25	0.70	0.50	0.40
6	4.8	5.8	19.35	34		0.70	0.50	0.67
7	5.8	7.8	18.33	22	35	0.62	0.50	0.40
8	7.8	8.7	19.35	38		0.70	0.50	0.79
9	8.7	10.5	18.33	22	35	0.62	0.50	0.40
10	10.5	10.8	19.35	36		0.70	0.50	0.73
11	10.8	16.2	19.35	41		0.70	0.50	0.86
12	16.2	16.6	19.35	36		0.70	0.50	0.73
13	16.6	18.7	19.35	41		0.70	0.50	0.86
14	18.7	18.9	19.35	36		0.70	0.50	0.73
15	18.9	21.2	19.35	41		0.70	0.50	0.86
16	21.2	22.3	19.35	36		0.70	0.50	0.73
17	22.3	23.3	19.35	41		0.70	0.50	0.86
18	23.3	23.6	19.35	36		0.70	0.50	0.73
19	23.6	23.8	19.35	41		0.70	0.50	0.86
20	23.8	25.0	19.35	36		0.70	0.50	0.73

1.1.6.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7753	7683

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	2.8	10.29	3.88	722.74	817.40	704.14	10.29	3.88	722.74	817.40	704.14
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	5.7	10.62	7.88	746.16	843.89	724.42	10.62	7.88	746.16	843.89	724.42
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	8.5	10.95	12.01	769.58	870.38	744.80	10.95	12.01	769.58	870.38	744.80
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	11.3	11.29	16.27	793.01	896.87	765.30	11.29	16.27	793.01	896.87	765.30
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	14.1	11.62	20.65	816.43	923.36	785.90	11.62	20.65	816.43	923.36	785.90
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	17.0	11.95	25.15	839.85	949.85	859.58	11.95	25.15	839.85	949.85	859.58
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	19.8	12.29	29.78	863.28	976.34	934.53	12.29	29.78	863.28	976.34	934.53
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	22.6	12.62	34.54	886.70	1002.83	1010.73	12.62	34.54	886.70	1002.83	1010.73
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	25.4	12.95	39.43	910.12	1029.33	1088.20	12.95	39.43	910.12	1029.33	1088.20
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	28.3	13.29	44.43	933.55	1055.82	1166.94	13.29	44.43	933.55	1055.82	1166.94
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	31.1	13.62	49.57	956.97	1082.31	1246.94	13.62	49.57	956.97	1082.31	1246.94
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	33.9	13.95	54.83	980.39	1108.80	1328.21	13.95	54.83	980.39	1108.80	1328.21
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	36.8	14.29	60.22	1003.82	1135.29	1278.83	14.29	60.22	1003.82	1135.29	1269.07
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	39.6	14.62	65.73	1027.24	1161.78	1227.92	14.62	65.73	1027.24	1161.78	1208.49
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	42.4	14.95	71.37	1050.66	1188.27	1175.47	14.95	71.37	1050.66	1188.27	1146.46
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	45.2	18.06	78.17	1769.53	2001.29	1122.40	18.06	78.17	1769.53	2001.29	1083.90
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	48.1	18.46	85.13	1808.12	2044.93	1014.85	18.46	85.13	1808.12	2044.93	966.95
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	50.9	18.85	92.24	1846.71	2088.58	904.63	18.85	92.24	1846.71	2088.58	847.43
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	53.7	19.24	99.49	1885.30	2132.22	858.10	19.24	99.49	1885.30	2132.22	800.90
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	56.5	19.64	106.90	1923.89	2175.87	810.32	19.64	106.90	1923.89	2175.87	753.13
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	59.4	20.03	114.45	1962.48	2219.51	761.29	20.03	114.45	1962.48	2219.51	704.10
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	62.2	20.43	122.15	2001.07	2263.15	711.01	20.43	122.15	2001.07	2263.15	653.81
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	65.0	17.50	128.75	307.70	347.99	658.38	10.17	125.98	179.51	203.02	598.78

Breve termine

Lungo termine

Palo

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	67.9	17.50	135.35	309.53	350.07	736.28	10.34	129.88	182.55	206.46	684.10
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	70.7	17.50	141.94	311.36	352.14	815.60	10.51	133.84	185.59	209.90	770.79
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	73.5	17.50	148.54	313.19	354.21	896.33	10.68	137.87	188.63	213.33	858.87
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	76.3	17.50	155.14	315.03	356.29	978.48	10.85	141.96	191.67	216.77	948.33
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	79.2	17.50	161.73	316.86	358.36	1062.05	11.03	146.12	194.71	220.21	1039.17
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	82.0	18.59	168.74	1190.11	1345.98	1073.79	18.59	153.13	1190.11	1345.98	1045.26
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	84.8	18.91	175.87	1210.55	1369.10	1019.26	18.91	160.25	1210.55	1369.10	975.88
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	87.7	19.23	183.12	1231.00	1392.22	963.42	19.23	167.50	1231.00	1392.22	905.27
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	90.5	19.55	190.49	1251.44	1415.35	906.26	19.55	174.87	1251.44	1415.35	833.45
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	93.3	19.87	197.98	1271.88	1438.47	847.80	19.87	182.36	1271.88	1438.47	760.40
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	96.1	20.19	205.59	1292.33	1461.59	788.02	20.19	189.97	1292.33	1461.59	686.13
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	99.0	20.50	213.32	1312.77	1484.71	726.93	20.50	197.70	1312.77	1484.71	610.64
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	101.8	20.82	221.17	1333.22	1507.83	664.52	20.82	205.55	1333.22	1507.83	533.93
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	104.6	21.14	229.14	1353.66	1530.95	600.81	21.14	213.52	1353.66	1530.95	456.01
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	107.4	21.46	237.23	1374.10	1554.07	535.78	21.46	221.61	1374.10	1554.07	376.85
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	110.3	21.70	245.41	428.04	484.11	469.41	13.13	226.56	231.78	262.13	293.65
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	113.1	21.70	253.59	429.88	486.18	475.23	13.30	231.58	234.82	265.57	297.72
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	115.9	21.70	261.77	431.71	488.25	481.05	13.47	236.65	237.86	269.01	301.86
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	118.8	21.70	269.95	433.54	490.32	486.87	13.64	241.80	240.90	272.45	306.05
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	121.6	21.70	278.13	435.38	492.40	492.69	13.81	247.00	243.93	275.88	310.30
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	124.4	21.70	286.32	437.21	494.47	498.52	13.99	252.28	246.97	279.32	314.60
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	127.2	21.70	294.50	439.04	496.54	504.34	14.16	257.61	250.01	282.76	318.96
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	130.1	21.70	302.68	440.87	498.62	510.16	14.33	263.02	253.05	286.20	323.38
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	132.9	21.70	310.86	442.71	500.69	515.98	14.50	268.48	256.09	289.63	327.85
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	135.7	21.70	319.04	444.54	502.76	521.80	14.67	274.02	259.13	293.07	332.38
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	138.5	21.70	327.22	446.37	504.84	716.90	14.85	279.61	262.17	296.51	539.35
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	141.4	21.70	335.40	448.21	506.91	914.47	15.02	285.28	265.21	299.94	748.76
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	144.2	21.70	343.58	450.04	508.98	1114.51	15.19	291.00	268.25	303.38	960.60
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	147.0	21.70	351.76	451.87	511.06	1317.02	15.36	296.79	271.29	306.82	1174.88
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	149.9	21.70	359.94	453.71	513.13	1522.00	15.54	302.65	274.33	310.26	1391.59
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	152.7	21.70	368.12	455.54	515.20	1729.45	15.71	308.57	277.37	313.69	1610.74
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	155.5	21.70	376.30	457.37	517.27	1939.37	15.88	314.56	280.41	317.13	1832.32
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	158.3	21.70	384.48	459.20	519.35	2151.76	16.05	320.61	283.45	320.57	2056.34
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	161.2	21.70	392.66	461.04	521.42	2366.62	16.22	326.73	286.48	324.01	2282.79
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	164.0	21.70	400.85	462.87	523.49	2372.52	16.40	332.91	289.52	327.44	2288.13
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	166.8	32.54	413.11	2949.95	3336.32	2381.96	32.54	345.18	2949.95	3336.32	2298.77
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	169.6	32.92	425.52	2984.22	3375.08	2202.26	32.92	357.59	2984.22	3375.08	2107.14
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	172.5	33.30	438.08	3018.50	3413.84	2020.20	33.30	370.14	3018.50	3413.84	1913.26
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	175.3	33.68	450.77	3052.77	3452.60	1835.80	33.68	382.83	3052.77	3452.60	1717.13
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	178.1	34.05	463.61	3087.04	3491.36	1649.06	34.05	395.67	3087.04	3491.36	1518.74
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	181.0	34.43	476.59	3121.31	3530.12	1459.96	34.43	408.65	3121.31	3530.12	1318.09
8.5	6.5	8	0.70	0.50	0.79	35.40	35.92	183.8	34.81	489.71	3155.58	3568.88	1268.53	34.81	421.78	3155.58	3568.88	1115.19
8.6	6.6	8	0.70	0.50	0.79	35.40	35.92	186.6	35.19	502.98	3189.85	3607.64	1074.74	35.19	435.04	3189.85	3607.64	910.04
8.7	6.7	8	0.70	0.50	0.79	35.40	35.92	189.4	35.57	516.39	3224.13	3646.40	878.61	35.57	448.45	3224.13	3646.40	702.63
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	192.3	21.70	524.57	482.12	545.26	675.46	18.30	455.35	323.19	365.52	487.18
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	195.1	21.70	532.75	483.95	547.34	681.28	18.47	462.32	326.23	368.96	492.95
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	197.9	21.70	540.93	485.78	549.41	687.10	18.65	469.35	329.27	372.40	498.79

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	200.7	21.70	549.11	487.62	551.48	692.92	18.82	476.44	332.31	375.83	504.67
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	203.6	21.70	557.29	489.45	553.55	698.75	18.99	483.60	335.35	379.27	510.62
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	206.4	21.70	565.47	491.28	555.63	704.57	19.16	490.82	338.39	382.71	516.62
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	209.2	21.70	573.65	493.12	557.70	710.39	19.34	498.11	341.43	386.14	522.68
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	212.1	21.70	581.83	494.95	559.77	716.21	19.51	505.47	344.47	389.58	528.79
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	214.9	21.70	590.02	496.78	561.85	908.90	19.68	512.89	347.51	393.02	732.27
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	217.7	21.70	598.20	498.62	563.92	1103.47	19.85	520.37	350.54	396.46	937.61
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	220.5	21.70	606.38	500.45	565.99	1299.95	20.02	527.92	353.58	399.89	1144.81
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	223.4	21.70	614.56	502.28	568.07	1642.49	20.20	535.53	356.62	403.33	1498.04
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	226.2	21.70	622.74	504.11	570.14	1988.18	20.37	543.21	359.66	406.77	1854.39
10.1	8.1	9	0.62	0.50	0.40	19.00	3.57	229.0	21.70	630.92	505.95	572.21	2337.03	20.54	550.95	362.70	410.21	2213.87
10.2	8.2	9	0.62	0.50	0.40	19.00	3.57	231.8	21.70	639.10	507.78	574.29	2689.04	20.71	558.76	365.74	413.64	2576.46
10.3	8.3	9	0.62	0.50	0.40	19.00	3.57	234.7	21.70	647.28	509.61	576.36	3044.21	20.88	566.64	368.78	417.08	2942.18
10.4	8.4	9	0.62	0.50	0.40	19.00	3.57	237.5	21.70	655.46	511.45	578.43	3402.53	21.06	574.57	371.82	420.52	3311.02
10.5	8.5	9	0.62	0.50	0.40	19.00	3.57	240.3	21.70	663.64	513.28	580.50	3764.01	21.23	582.58	374.86	423.96	3682.98
10.6	8.6	10	0.70	0.50	0.73	33.10	28.00	243.2	38.66	678.22	2968.67	3357.49	4134.21	38.66	597.15	2968.67	3357.49	4063.72
10.7	8.7	10	0.70	0.50	0.73	33.10	28.00	246.0	39.01	692.92	2995.38	3387.70	4320.67	39.01	611.86	2995.38	3387.70	4250.18
10.8	8.8	10	0.70	0.50	0.73	33.10	28.00	248.8	39.36	707.76	3022.09	3417.90	4508.36	39.36	626.70	3022.09	3417.90	4437.87
10.9	8.9	11	0.70	0.50	0.86	37.70	45.38	251.6	46.83	725.42	4941.77	5589.02	4699.61	46.83	644.35	4941.77	5589.02	4629.11
11.0	9.0	11	0.70	0.50	0.86	37.70	45.38	254.5	47.24	743.23	4985.07	5637.98	4747.92	47.24	662.16	4985.07	5637.98	4677.43
11.1	9.1	11	0.70	0.50	0.86	37.70	45.38	257.3	47.65	761.19	5028.36	5686.94	4796.21	47.65	680.13	5028.36	5686.94	4725.72
11.2	9.2	11	0.70	0.50	0.86	37.70	45.38	260.1	48.07	779.31	5071.65	5735.90	4844.47	48.07	698.25	5071.65	5735.90	4773.98
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	48.48	797.59	5114.94	5784.86	4892.70	48.48	716.52	5114.94	5784.86	4822.21
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	48.89	816.02	5158.23	5833.82	4940.89	48.89	734.95	5158.23	5833.82	4870.40
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	49.30	834.60	5201.52	5882.79	4989.04	49.30	753.54	5201.52	5882.79	4918.55
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	49.71	853.34	5244.82	5931.75	5037.15	49.71	772.28	5244.82	5931.75	4966.66
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	50.12	872.23	5286.16	5978.51	5085.21	50.12	791.17	5286.16	5978.51	5014.72
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	50.53	891.28	5327.47	6025.22	5133.37	50.53	810.22	5327.47	6025.22	5062.88
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.94	910.49	5368.73	6071.89	5181.63	50.94	829.42	5368.73	6071.89	5111.14
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	51.35	929.84	5409.95	6118.51	5229.99	51.35	848.78	5409.95	6118.51	5159.49
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	51.76	949.36	5451.13	6165.08	5278.44	51.76	868.29	5451.13	6165.08	5207.95
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	52.17	969.02	5492.26	6211.61	5326.99	52.17	887.96	5492.26	6211.61	5256.50
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	52.58	988.84	5533.36	6258.08	5375.64	52.58	907.78	5533.36	6258.08	5305.15
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.99	1008.82	5574.40	6304.50	5424.38	52.99	927.75	5574.40	6304.50	5353.89
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	53.40	1028.95	5615.41	6350.88	5473.22	53.40	947.89	5615.41	6350.88	5402.73
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	53.81	1049.24	5656.37	6397.20	5522.16	53.81	968.17	5656.37	6397.20	5451.67
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	54.22	1069.68	5697.29	6443.48	5571.20	54.22	988.61	5697.29	6443.48	5500.71
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	54.63	1090.27	5738.16	6489.70	5620.33	54.63	1009.21	5738.16	6489.70	5549.84
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	55.04	1111.02	5778.98	6535.88	5669.55	55.04	1029.96	5778.98	6535.88	5599.06
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	55.45	1131.93	5819.77	6582.00	5718.88	55.45	1050.86	5819.77	6582.00	5648.38
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	55.86	1152.98	5860.50	6628.07	5768.29	55.86	1071.92	5860.50	6628.07	5697.80
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	56.27	1174.20	5901.19	6674.09	5817.80	56.27	1093.13	5901.19	6674.09	5747.31
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	56.68	1195.57	5941.84	6720.06	5867.41	56.68	1114.50	5941.84	6720.06	5796.92
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	57.09	1217.09	5982.43	6765.97	5917.11	57.09	1136.02	5982.43	6765.97	5846.62
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	57.50	1238.77	6022.99	6811.84	5966.91	57.50	1157.70	6022.99	6811.84	5896.42
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	57.91	1260.60	6063.49	6857.65	6016.80	57.91	1179.53	6063.49	6857.65	5946.31
13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	58.32	1282.59	6103.95	6903.40	6066.78	58.32	1201.52	6103.95	6903.40	5996.29

13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	58.73	1304.73	6144.36	6949.11	6116.86	58.73	1223.66	6144.36	6949.11	6046.37
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	59.14	1327.02	6184.72	6994.76	6167.03	59.14	1245.96	6184.72	6994.76	6096.54
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	59.55	1349.48	6225.04	7040.35	6217.30	59.55	1268.41	6225.04	7040.35	6146.80
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.96	1372.08	6265.31	7085.89	6267.65	59.96	1291.02	6265.31	7085.89	6197.16
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	60.37	1394.84	6305.52	7131.38	6318.10	60.37	1313.78	6305.52	7131.38	6247.61
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	60.78	1417.76	6345.69	7176.81	6368.65	60.78	1336.69	6345.69	7176.81	6298.15
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	61.19	1440.83	6385.81	7222.19	6419.28	61.19	1359.76	6385.81	7222.19	6348.79
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	61.60	1464.05	6425.89	7267.51	6470.01	61.60	1382.99	6425.89	7267.51	6399.51
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	62.01	1487.43	6465.91	7312.77	6520.83	62.01	1406.36	6465.91	7312.77	6450.33
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.43	1510.96	6505.88	7357.98	6571.74	62.43	1429.90	6505.88	7357.98	6501.24
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.84	1534.65	6545.80	7403.13	6622.74	62.84	1453.59	6545.80	7403.13	6552.24
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	63.25	1558.50	6585.67	7448.22	6673.83	63.25	1477.43	6585.67	7448.22	6603.34
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.66	1582.49	6625.49	7493.26	6725.01	63.66	1501.43	6625.49	7493.26	6654.52
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	64.07	1606.65	6665.26	7538.24	6776.29	64.07	1525.58	6665.26	7538.24	6705.79
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.48	1630.95	6704.98	7583.16	6827.65	64.48	1549.89	6704.98	7583.16	6757.16
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.89	1655.41	6744.65	7628.02	6670.26	64.89	1574.35	6744.65	7628.02	6599.76
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	65.30	1680.03	6784.27	7672.82	6511.80	65.30	1598.97	6784.27	7672.82	6441.30
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.71	1704.80	6823.83	7717.57	6352.27	65.71	1623.74	6823.83	7717.57	6281.78
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	66.12	1729.73	6863.34	7762.25	6191.68	66.12	1648.66	6863.34	7762.25	6121.19
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.53	1754.81	6902.80	7806.88	6243.49	66.53	1673.74	6902.80	7806.88	6173.00
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.94	1780.04	6942.20	7851.45	6295.40	66.94	1698.98	6942.20	7851.45	6224.90
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	67.35	1805.43	6981.55	7895.95	6347.39	67.35	1724.37	6981.55	7895.95	6276.89
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.76	1830.98	7020.85	7940.40	6399.46	67.76	1749.91	7020.85	7940.40	6328.97
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	68.17	1856.68	7060.10	7984.78	6451.63	68.17	1775.61	7060.10	7984.78	6381.14
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.58	1882.53	7099.29	8029.10	6503.88	68.58	1801.47	7099.29	8029.10	6433.39
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.49	1904.58	4396.19	4971.97	6552.78	58.49	1823.51	4396.19	4971.97	6482.29
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.84	1926.76	4420.09	4999.00	6810.60	58.84	1845.70	4420.09	4999.00	6740.10
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	59.18	1949.07	4443.95	5025.99	7069.63	59.18	1868.01	4443.95	5025.99	6999.14
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.53	1971.52	4467.78	5052.94	7329.89	59.53	1890.45	4467.78	5052.94	7259.40
16.7	14.7	13	0.70	0.50	0.86	37.70	44.42	415.6	70.63	1998.14	7294.41	8249.79	7594.89	70.63	1917.08	7294.41	8249.79	7524.40
16.8	14.8	13	0.70	0.50	0.86	37.70	44.39	418.5	71.04	2024.93	7333.27	8293.73	7647.67	71.04	1943.86	7333.27	8293.73	7577.18
16.9	14.9	13	0.70	0.50	0.86	37.70	44.37	421.3	71.45	2051.86	7372.07	8337.62	7700.53	71.45	1970.80	7372.07	8337.62	7630.04
17.0	15.0	13	0.70	0.50	0.86	37.70	44.35	424.1	71.86	2078.95	7410.82	8381.44	7753.48	71.86	1997.89	7410.82	8381.44	7682.99

1.1.6.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5563	5504

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	2.0	10.29	3.23	722.74	567.64	489.45	10.29	3.23	722.74	567.64	489.45
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	3.9	10.62	6.57	746.16	586.03	504.02	10.62	6.57	746.16	586.03	504.02
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	5.9	10.95	10.01	769.58	604.43	518.67	10.95	10.01	769.58	604.43	518.67
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	7.9	11.29	13.55	793.01	622.83	533.42	11.29	13.55	793.01	622.83	533.42
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	9.8	11.62	17.21	816.43	641.22	548.26	11.62	17.21	816.43	641.22	548.26
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	11.8	11.95	20.96	839.85	659.62	599.97	11.95	20.96	839.85	659.62	599.97
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	13.7	12.29	24.82	863.28	678.02	652.57	12.29	24.82	863.28	678.02	652.57
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	15.7	12.62	28.79	886.70	696.41	706.07	12.62	28.79	886.70	696.41	706.07
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	17.7	12.95	32.85	910.12	714.81	760.46	12.95	32.85	910.12	714.81	760.46
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	19.6	13.29	37.03	933.55	733.21	815.74	13.29	37.03	933.55	733.21	815.74
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	21.6	13.62	41.31	956.97	751.60	871.92	13.62	41.31	956.97	751.60	871.92
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	23.6	13.95	45.69	980.39	770.00	928.99	13.95	45.69	980.39	770.00	928.99
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	25.5	14.29	50.18	1003.82	788.40	895.35	14.29	50.18	1003.82	788.40	888.57
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	27.5	14.62	54.77	1027.24	806.79	860.66	14.62	54.77	1027.24	806.79	847.16
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	29.5	14.95	59.47	1050.66	825.19	824.92	14.95	59.47	1050.66	825.19	804.77
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	31.4	18.06	65.15	1769.53	1389.79	788.89	18.06	65.15	1769.53	1389.79	762.15
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	33.4	18.46	70.94	1808.12	1420.09	715.04	18.46	70.94	1808.12	1420.09	681.78
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	35.3	18.85	76.87	1846.71	1450.40	639.35	18.85	76.87	1846.71	1450.40	599.63
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	37.3	19.24	82.91	1885.30	1480.71	607.92	19.24	82.91	1885.30	1480.71	568.20
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	39.3	19.64	89.08	1923.89	1511.02	575.64	19.64	89.08	1923.89	1511.02	535.91
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	41.2	20.03	95.37	1962.48	1541.33	542.50	20.03	95.37	1962.48	1541.33	502.78
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	43.2	20.43	101.79	2001.07	1571.63	508.51	20.43	101.79	2001.07	1571.63	468.79

Breve termine

Lungo termine

Palo

4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	45.2	17.50	107.29	307.70	241.66	472.76	10.17	104.99	179.51	140.99	431.04
4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	47.1	17.50	112.79	309.53	243.10	527.65	10.34	108.23	182.55	143.37	490.75
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	49.1	17.50	118.29	311.36	244.54	583.53	10.51	111.54	185.59	145.76	551.44
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	51.1	17.50	123.78	313.19	245.98	640.39	10.68	114.89	188.63	148.15	613.09
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	53.0	17.50	129.28	315.03	247.42	698.24	10.85	118.30	191.67	150.54	675.71
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	55.0	17.50	134.78	316.86	248.86	757.07	11.03	121.77	194.71	152.92	739.29
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	56.9	18.59	140.62	1190.11	934.71	766.06	18.59	127.60	1190.11	934.71	744.37
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	58.9	18.91	146.56	1210.55	950.77	729.06	18.91	133.55	1210.55	950.77	697.05
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	60.9	19.23	152.60	1231.00	966.82	691.16	19.23	139.59	1231.00	966.82	648.89
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	62.8	19.55	158.74	1251.44	982.88	652.36	19.55	145.73	1251.44	982.88	599.90
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	64.8	19.87	164.98	1271.88	998.94	612.66	19.87	151.97	1271.88	998.94	550.08
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	66.8	20.19	171.32	1292.33	1014.99	572.06	20.19	158.31	1292.33	1014.99	499.42
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	68.7	20.50	177.76	1312.77	1031.05	530.57	20.50	164.75	1312.77	1031.05	447.94
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	70.7	20.82	184.31	1333.22	1047.11	488.19	20.82	171.29	1333.22	1047.11	395.61
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	72.6	21.14	190.95	1353.66	1063.16	444.90	21.14	177.94	1353.66	1063.16	342.46
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	74.6	21.46	197.69	1374.10	1079.22	400.72	21.46	184.68	1374.10	1079.22	288.47
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	76.6	21.70	204.51	428.04	336.18	355.62	13.13	188.80	231.78	182.04	231.28
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	78.5	21.70	211.33	429.88	337.62	360.65	13.30	192.98	234.82	184.42	234.72
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	80.5	21.70	218.14	431.71	339.06	365.68	13.47	197.21	237.86	186.81	238.20
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	82.5	21.70	224.96	433.54	340.50	370.71	13.64	201.50	240.90	189.20	241.74
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	84.4	21.70	231.78	435.38	341.94	375.74	13.81	205.84	243.93	191.59	245.31
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	86.4	21.70	238.60	437.21	343.38	380.77	13.99	210.23	246.97	193.97	248.94
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	88.4	21.70	245.41	439.04	344.82	385.80	14.16	214.68	250.01	196.36	252.61
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	90.3	21.70	252.23	440.87	346.26	390.83	14.33	219.18	253.05	198.75	256.33
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	92.3	21.70	259.05	442.71	347.70	395.86	14.50	223.74	256.09	201.13	260.10
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	94.2	21.70	265.86	444.54	349.14	400.89	14.67	228.35	259.13	203.52	263.91
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	96.2	21.70	272.68	446.37	350.58	537.37	14.85	233.01	262.17	205.91	408.32
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	98.2	21.70	279.50	448.21	352.02	675.56	15.02	237.73	265.21	208.30	554.42
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	100.1	21.70	286.32	450.04	353.46	815.46	15.19	242.50	268.25	210.68	702.23
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	102.1	21.70	293.13	451.87	354.90	957.08	15.36	247.33	271.29	213.07	851.73
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	104.1	21.70	299.95	453.71	356.34	1100.41	15.54	252.21	274.33	215.46	1002.93
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	106.0	21.70	306.77	455.54	357.78	1245.47	15.71	257.14	277.37	217.84	1155.83
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	108.0	21.70	313.59	457.37	359.22	1392.23	15.88	262.13	280.41	220.23	1310.43
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	110.0	21.70	320.40	459.20	360.66	1540.71	16.05	267.18	283.45	222.62	1466.73
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	111.9	21.70	327.22	461.04	362.10	1690.91	16.22	272.27	286.48	225.00	1624.73
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	113.9	21.70	334.04	462.87	363.54	1695.99	16.40	277.42	289.52	227.39	1629.19
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	115.8	32.54	344.26	2949.95	2316.89	1704.03	32.54	287.65	2949.95	2316.89	1638.06
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	117.8	32.92	354.60	2984.22	2343.80	1580.74	32.92	297.99	2984.22	2343.80	1506.48
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	119.8	33.30	365.06	3018.50	2370.72	1455.83	33.30	308.45	3018.50	2370.72	1373.36
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	121.7	33.68	375.64	3052.77	2397.64	1329.30	33.68	319.03	3052.77	2397.64	1238.68
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	123.7	34.05	386.34	3087.04	2424.56	1201.17	34.05	329.73	3087.04	2424.56	1102.46
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	125.7	34.43	397.16	3121.31	2451.47	1071.42	34.43	340.54	3121.31	2451.47	964.70
8.5	6.5	8	0.70	0.50	0.79	35.40	35.92	127.6	34.81	408.10	3155.58	2478.39	940.06	34.81	351.48	3155.58	2478.39	825.38
8.6	6.6	8	0.70	0.50	0.79	35.40	35.92	129.6	35.19	419.15	3189.85	2505.31	807.09	35.19	362.54	3189.85	2505.31	684.51
8.7	6.7	8	0.70	0.50	0.79	35.40	35.92	131.6	35.57	430.32	3224.13	2532.22	672.51	35.57	373.71	3224.13	2532.22	542.10
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	133.5	21.70	437.14	482.12	378.65	532.42	18.30	379.46	323.19	253.83	393.31
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	135.5	21.70	443.96	483.95	380.09	537.45	18.47	385.26	326.23	256.22	398.16

9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	137.4	21.70	450.78	485.78	381.53	542.48	18.65	391.12	329.27	258.61	403.06
9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	139.4	21.70	457.59	487.62	382.97	547.51	18.82	397.03	332.31	260.99	408.00
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	141.4	21.70	464.41	489.45	384.41	552.55	18.99	403.00	335.35	263.38	412.96
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	143.3	21.70	471.23	491.28	385.85	557.58	19.16	409.02	338.39	265.77	417.96
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	145.3	21.70	478.04	493.12	387.29	562.61	19.34	415.09	341.43	268.16	422.99
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	147.3	21.70	484.86	494.95	388.73	567.64	19.51	421.22	344.47	270.54	428.06
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	149.2	21.70	491.68	496.78	390.17	701.97	19.68	427.40	347.51	272.93	569.80
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	151.2	21.70	498.50	498.62	391.61	837.53	19.85	433.64	350.54	275.32	712.75
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	153.2	21.70	505.31	500.45	393.05	974.33	20.02	439.93	353.58	277.70	856.92
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	155.1	21.70	512.13	502.28	394.49	1212.12	20.20	446.28	356.62	280.09	1102.07
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	157.1	21.70	518.95	504.11	395.93	1451.98	20.37	452.68	359.66	282.48	1349.27
10.1	8.1	9	0.62	0.50	0.40	19.00	3.56	159.0	21.70	525.77	505.95	397.37	1693.90	20.54	459.13	362.46	284.67	1598.51
10.2	8.2	9	0.62	0.50	0.40	19.00	3.56	161.0	21.70	532.58	507.78	398.81	1937.87	20.71	465.63	365.24	286.86	1849.80
10.3	8.3	9	0.62	0.50	0.40	19.00	3.56	163.0	21.70	539.40	509.61	400.25	2183.89	20.88	472.20	368.03	289.05	2103.13
10.4	8.4	9	0.62	0.50	0.40	19.00	3.56	164.9	21.70	546.22	511.45	401.69	2431.96	21.06	478.81	370.80	291.23	2358.51
10.5	8.5	9	0.62	0.50	0.40	19.00	3.56	166.9	21.70	553.03	513.28	403.13	2682.07	21.23	485.48	373.57	293.41	2615.94
10.6	8.6	10	0.70	0.50	0.73	33.10	27.91	168.9	38.66	565.18	2959.88	2324.69	2938.87	38.66	497.63	2959.88	2324.69	2880.12
10.7	8.7	10	0.70	0.50	0.73	33.10	27.90	170.8	39.01	577.44	2985.00	2344.42	3068.49	39.01	509.88	2985.00	2344.42	3009.75
10.8	8.8	10	0.70	0.50	0.73	33.10	27.89	172.8	39.36	589.80	3010.09	2364.12	3199.02	39.36	522.25	3010.09	2364.12	3140.28
10.9	8.9	11	0.70	0.50	0.86	37.70	45.19	174.8	46.83	604.51	4921.65	3865.46	3332.39	46.83	536.96	4921.65	3865.46	3273.65
11.0	9.0	11	0.70	0.50	0.86	37.70	45.17	176.7	47.24	619.36	4962.44	3897.50	3366.90	47.24	551.80	4962.44	3897.50	3308.16
11.1	9.1	11	0.70	0.50	0.86	37.70	45.15	178.7	47.65	634.33	5003.18	3929.49	3401.50	47.65	566.77	5003.18	3929.49	3342.75
11.2	9.2	11	0.70	0.50	0.86	37.70	45.13	180.6	48.07	649.43	5043.86	3961.44	3436.17	48.07	581.87	5043.86	3961.44	3377.42
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	48.48	664.66	5084.49	3993.35	3470.92	48.48	597.10	5084.49	3993.35	3412.17
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	48.89	680.01	5125.06	4025.22	3505.75	48.89	612.46	5125.06	4025.22	3447.00
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	49.30	695.50	5165.58	4057.04	3540.65	49.30	627.95	5165.58	4057.04	3481.91
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	49.71	711.12	5206.04	4088.81	3575.64	49.71	643.56	5206.04	4088.81	3516.90
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	50.12	726.86	5246.44	4120.55	3610.70	50.12	659.31	5246.44	4120.55	3551.96
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	50.53	742.74	5286.79	4152.23	3645.84	50.53	675.18	5286.79	4152.23	3587.10
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.94	758.74	5327.07	4183.87	3681.06	50.94	691.18	5327.07	4183.87	3622.32
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	51.35	774.87	5367.31	4215.47	3716.36	51.35	707.31	5367.31	4215.47	3657.61
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	51.76	791.13	5407.48	4247.02	3751.73	51.76	723.57	5407.48	4247.02	3692.99
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	52.17	807.52	5447.59	4278.53	3787.18	52.17	739.96	5447.59	4278.53	3728.44
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	52.58	824.04	5487.64	4309.99	3822.71	52.58	756.48	5487.64	4309.99	3763.96
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.99	840.68	5527.64	4341.40	3858.31	52.99	773.13	5527.64	4341.40	3799.56
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	53.40	857.46	5567.57	4372.76	3893.99	53.40	789.90	5567.57	4372.76	3835.24
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	53.81	874.36	5607.45	4404.08	3929.74	53.81	806.81	5607.45	4404.08	3871.00
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	54.22	891.40	5647.26	4435.35	3965.57	54.22	823.84	5647.26	4435.35	3906.83
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	54.63	908.56	5687.01	4466.57	4001.47	54.63	841.01	5687.01	4466.57	3942.73
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	55.04	925.85	5726.71	4497.74	4037.45	55.04	858.30	5726.71	4497.74	3978.71
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	55.45	943.27	5766.33	4528.87	4073.51	55.45	875.72	5766.33	4528.87	4014.76
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	55.86	960.82	5805.90	4559.94	4109.64	55.86	893.27	5805.90	4559.94	4050.89
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	56.27	978.50	5845.40	4590.97	4145.84	56.27	910.94	5845.40	4590.97	4087.10
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	56.68	996.31	5884.84	4621.95	4182.12	56.68	928.75	5884.84	4621.95	4123.37
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	57.09	1014.24	5924.22	4652.87	4218.47	57.09	946.69	5924.22	4652.87	4159.73
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	57.50	1032.31	5963.53	4683.75	4254.89	57.50	964.75	5963.53	4683.75	4196.15
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	57.91	1050.50	6002.78	4714.57	4291.39	57.91	982.94	6002.78	4714.57	4232.65

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	58.32	1068.82	6041.97	4745.35	4327.96	58.32	1001.27	6041.97	4745.35	4269.22
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	58.73	1087.27	6081.08	4776.07	4364.61	58.73	1019.72	6081.08	4776.07	4305.86
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	59.14	1105.85	6120.14	4806.74	4401.32	59.14	1038.30	6120.14	4806.74	4342.58
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	59.55	1124.56	6159.12	4837.36	4438.11	59.55	1057.01	6159.12	4837.36	4379.37
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.96	1143.40	6198.04	4867.93	4474.97	59.96	1075.85	6198.04	4867.93	4416.23
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	60.37	1162.37	6236.89	4898.44	4511.91	60.37	1094.81	6236.89	4898.44	4453.16
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	60.78	1181.46	6275.68	4928.91	4548.91	60.78	1113.91	6275.68	4928.91	4490.17
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	61.19	1200.69	6314.40	4959.31	4585.99	61.19	1133.13	6314.40	4959.31	4527.24
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	61.60	1220.04	6353.04	4989.67	4623.13	61.60	1152.49	6353.04	4989.67	4564.39
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	62.01	1239.53	6391.62	5019.97	4660.35	62.01	1171.97	6391.62	5019.97	4601.61
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.43	1259.14	6430.13	5050.22	4697.64	62.43	1191.58	6430.13	5050.22	4638.90
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.84	1278.88	6468.58	5080.41	4735.00	62.84	1211.32	6468.58	5080.41	4676.25
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	63.25	1298.75	6506.95	5110.54	4772.43	63.25	1231.19	6506.95	5110.54	4713.68
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.66	1318.74	6545.25	5140.62	4809.92	63.66	1251.19	6545.25	5140.62	4751.18
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	64.07	1338.87	6583.48	5170.65	4847.49	64.07	1271.32	6583.48	5170.65	4788.75
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.48	1359.13	6621.63	5200.62	4885.13	64.48	1291.57	6621.63	5200.62	4826.39
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.89	1379.51	6659.72	5230.53	4779.62	64.89	1311.96	6659.72	5230.53	4720.88
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	65.30	1400.03	6697.73	5260.39	4673.42	65.30	1332.47	6697.73	5260.39	4614.68
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.71	1420.67	6735.68	5290.19	4566.51	65.71	1353.11	6735.68	5290.19	4507.77
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	66.12	1441.44	6773.54	5319.93	4458.91	66.12	1373.89	6773.54	5319.93	4400.17
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.53	1462.34	6811.34	5349.61	4496.89	66.53	1394.79	6811.34	5349.61	4438.15
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.94	1483.37	6849.06	5379.24	4534.94	66.94	1415.81	6849.06	5379.24	4476.20
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	67.35	1504.53	6886.70	5408.81	4573.05	67.35	1436.97	6886.70	5408.81	4514.31
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.76	1525.81	6924.28	5438.31	4611.23	67.76	1458.26	6924.28	5438.31	4552.49
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	68.17	1547.23	6961.77	5467.76	4649.48	68.17	1479.68	6961.77	5467.76	4590.74
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.58	1568.78	6999.19	5497.15	4687.80	68.58	1501.22	6999.19	5497.15	4629.06
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.49	1587.15	4328.76	3399.80	4723.31	58.49	1519.60	4328.76	3399.80	4664.57
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.84	1605.63	4351.48	3417.65	4902.08	58.84	1538.08	4351.48	3417.65	4843.34
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	59.18	1624.23	4374.16	3435.46	5081.67	59.18	1556.67	4374.16	3435.46	5022.93
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.53	1642.93	4396.79	3453.23	5262.08	59.53	1575.38	4396.79	3453.23	5203.34
16.7	14.7	13	0.70	0.50	0.86	37.70	43.75	288.6	70.63	1665.12	7185.14	5643.19	5446.24	70.63	1597.57	7185.14	5643.19	5387.49
16.8	14.8	13	0.70	0.50	0.86	37.70	43.72	290.6	71.04	1687.44	7222.09	5672.22	5484.95	71.04	1619.88	7222.09	5672.22	5426.20
16.9	14.9	13	0.70	0.50	0.86	37.70	43.69	292.6	71.45	1709.89	7258.97	5701.18	5523.72	71.45	1642.33	7258.97	5701.18	5464.98
17.0	15.0	13	0.70	0.50	0.86	37.70	43.66	294.5	71.86	1732.46	7295.76	5730.08	5562.56	71.86	1664.91	7295.76	5730.08	5503.82

1.1.6.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3753	3706

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	1.3	10.29	2.59	722.74	363.29	313.70	10.29	2.59	722.74	363.29	313.70
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	2.5	10.62	5.25	746.16	375.06	323.49	10.62	5.25	746.16	375.06	323.49
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	3.8	10.95	8.01	769.58	386.83	333.34	10.95	8.01	769.58	386.83	333.34
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	5.0	11.29	10.84	793.01	398.61	343.28	11.29	10.84	793.01	398.61	343.28
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	6.3	11.62	13.76	816.43	410.38	353.28	11.62	13.76	816.43	410.38	353.28
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	7.5	11.95	16.77	839.85	422.16	386.90	11.95	16.77	839.85	422.16	386.90
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	8.8	12.29	19.86	863.28	433.93	421.10	12.29	19.86	863.28	433.93	421.10
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	10.1	12.62	23.03	886.70	445.70	455.89	12.62	23.03	886.70	445.70	455.89
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	11.3	12.95	26.28	910.12	457.48	491.27	12.95	26.28	910.12	457.48	491.27
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	12.6	13.29	29.62	933.55	469.25	527.23	13.29	29.62	933.55	469.25	527.23
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	13.8	13.62	33.05	956.97	481.03	563.78	13.62	33.05	956.97	481.03	563.78
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	15.1	13.95	36.55	980.39	492.80	600.91	13.95	36.55	980.39	492.80	600.91
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	16.3	14.29	40.14	1003.82	504.57	580.00	14.29	40.14	1003.82	504.57	575.67
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	17.6	14.62	43.82	1027.24	516.35	558.44	14.62	43.82	1027.24	516.35	549.81
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	18.8	14.95	47.58	1050.66	528.12	536.22	14.95	47.58	1050.66	528.12	523.33
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	20.1	18.06	52.12	1769.53	889.46	513.95	18.06	52.12	1769.53	889.46	496.84
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	21.4	18.46	56.76	1808.12	908.86	467.49	18.46	56.76	1808.12	908.86	446.21
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	22.6	18.85	61.49	1846.71	928.26	419.88	18.85	61.49	1846.71	928.26	394.46
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	23.9	19.24	66.33	1885.30	947.65	400.60	19.24	66.33	1885.30	947.65	375.18
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	25.1	19.64	71.27	1923.89	967.05	380.80	19.64	71.27	1923.89	967.05	355.38
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	26.4	20.03	76.30	1962.48	986.45	360.47	20.03	76.30	1962.48	986.45	335.05
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	27.6	20.43	81.43	2001.07	1005.85	339.61	20.43	81.43	2001.07	1005.85	314.19

Breve termine

Lungo termine

Palo

4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	28.9	17.50	85.83	307.70	154.66	317.49	10.17	83.99	179.51	90.23	290.47
4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	30.2	17.50	90.23	309.53	155.59	353.39	10.34	86.59	182.55	91.76	329.14
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	31.4	17.50	94.63	311.36	156.51	389.92	10.51	89.23	185.59	93.29	368.44
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	32.7	17.50	99.03	313.19	157.43	427.07	10.68	91.91	188.63	94.81	408.36
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	33.9	17.50	103.42	315.03	158.35	464.86	10.85	94.64	191.67	96.34	448.91
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	35.2	17.50	107.82	316.86	159.27	503.28	11.03	97.41	194.71	97.87	490.09
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	36.4	18.59	112.49	1190.11	598.21	509.85	18.59	102.08	1190.11	598.21	494.15
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	37.7	18.91	117.25	1210.55	608.49	486.99	18.91	106.84	1210.55	608.49	464.69
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	39.0	19.23	122.08	1231.00	618.77	463.57	19.23	111.67	1231.00	618.77	434.71
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	40.2	19.55	126.99	1251.44	629.04	439.59	19.55	116.58	1251.44	629.04	404.21
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	41.5	19.87	131.99	1271.88	639.32	415.06	19.87	121.57	1271.88	639.32	373.19
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	42.7	20.19	137.06	1292.33	649.59	389.96	20.19	126.65	1292.33	649.59	341.66
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	44.0	20.50	142.21	1312.77	659.87	364.30	20.50	131.80	1312.77	659.87	309.60
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	45.2	20.82	147.45	1333.22	670.15	338.08	20.82	137.03	1333.22	670.15	277.02
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	46.5	21.14	152.76	1353.66	680.42	311.30	21.14	142.35	1353.66	680.42	243.93
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	47.8	21.46	158.15	1374.10	690.70	283.96	21.46	147.74	1374.10	690.70	210.31
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	49.0	21.70	163.61	428.04	215.16	256.05	13.13	151.04	231.78	116.50	174.29
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	50.3	21.70	169.06	429.88	216.08	260.22	13.30	154.38	234.82	118.03	177.07
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	51.5	21.70	174.52	431.71	217.00	264.38	13.47	157.77	237.86	119.56	179.89
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	52.8	21.70	179.97	433.54	217.92	268.55	13.64	161.20	240.90	121.09	182.75
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	54.0	21.70	185.42	435.38	218.84	272.72	13.81	164.67	243.93	122.61	185.64
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	55.3	21.70	190.88	437.21	219.76	276.89	13.99	168.18	246.97	124.14	188.57
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	56.5	21.70	196.33	439.04	220.69	281.06	14.16	171.74	250.01	125.67	191.54
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	57.8	21.70	201.78	440.87	221.61	285.23	14.33	175.34	253.05	127.20	194.55
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	59.1	21.70	207.24	442.71	222.53	289.39	14.50	178.99	256.09	128.73	197.59
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	60.3	21.70	212.69	444.54	223.45	293.56	14.67	182.68	259.13	130.25	200.67
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	61.6	21.70	218.15	446.37	224.37	381.85	14.85	186.41	262.17	131.78	293.74
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	62.8	21.70	223.60	448.21	225.29	471.24	15.02	190.18	265.21	133.31	387.91
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	64.1	21.70	229.05	450.04	226.21	561.73	15.19	194.00	268.25	134.84	483.17
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	65.3	21.70	234.51	451.87	227.14	653.31	15.36	197.86	271.29	136.36	579.52
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	66.6	21.70	239.96	453.71	228.06	746.00	15.54	201.77	274.33	137.89	676.97
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	67.9	21.70	245.41	455.54	228.98	839.78	15.71	205.71	277.37	139.42	775.51
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	69.1	21.70	250.87	457.37	229.90	934.60	15.88	209.71	280.41	140.95	875.09
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	70.4	21.70	256.32	459.20	230.82	1030.45	16.05	213.74	283.45	142.48	975.69
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	71.6	21.70	261.78	461.04	231.74	1127.33	16.22	217.82	286.48	144.00	1077.33
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	72.9	21.70	267.23	462.87	232.66	1131.53	16.40	221.94	289.52	145.53	1080.86
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	74.1	32.54	275.41	2949.95	1482.81	1138.10	32.54	230.12	2949.95	1482.81	1087.91
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	75.4	32.92	283.68	2984.22	1500.03	1060.63	32.92	238.39	2984.22	1500.03	1005.09
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	76.7	33.30	292.05	3018.50	1517.26	982.14	33.30	246.76	3018.50	1517.26	921.27
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	77.9	33.68	300.52	3052.77	1534.49	902.64	33.68	255.22	3052.77	1534.49	836.48
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	79.2	34.05	309.07	3087.04	1551.72	822.12	34.05	263.78	3087.04	1551.72	750.70
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	80.4	34.43	317.73	3121.31	1568.94	740.59	34.43	272.44	3121.31	1568.94	663.93
8.5	6.5	8	0.70	0.50	0.79	35.40	35.90	81.7	34.81	326.48	3153.75	1585.25	658.04	34.81	281.18	3153.75	1585.25	576.17
8.6	6.6	8	0.70	0.50	0.79	35.40	35.88	82.9	35.19	335.32	3186.14	1601.53	574.54	35.19	290.03	3186.14	1601.53	487.50
8.7	6.7	8	0.70	0.50	0.79	35.40	35.86	84.2	35.57	344.26	3218.48	1617.78	490.09	35.57	298.97	3218.48	1617.78	397.90
8.8	6.8	9	0.62	0.50	0.40	19.00	3.56	85.5	21.70	349.71	482.12	242.34	401.57	18.30	303.57	322.08	161.90	303.52
8.9	6.9	9	0.62	0.50	0.40	19.00	3.55	86.7	21.70	355.17	483.95	243.26	405.74	18.47	308.21	324.83	163.28	307.31

9.0	7.0	9	0.62	0.50	0.40	19.00	3.55	88.0	21.70	360.62	485.78	244.18	409.91	18.65	312.90	327.57	164.65	311.14
9.1	7.1	9	0.62	0.50	0.40	19.00	3.55	89.2	21.70	366.07	487.62	245.10	414.07	18.82	317.63	330.30	166.03	315.00
9.2	7.2	9	0.62	0.50	0.40	19.00	3.54	90.5	21.70	371.53	489.45	246.02	418.24	18.99	322.40	333.03	167.40	318.89
9.3	7.3	9	0.62	0.50	0.40	19.00	3.54	91.7	21.70	376.98	491.28	246.95	422.41	19.16	327.22	335.75	168.77	322.83
9.4	7.4	9	0.62	0.50	0.40	19.00	3.54	93.0	21.70	382.44	493.12	247.87	426.58	19.34	332.08	338.46	170.13	326.79
9.5	7.5	9	0.62	0.50	0.40	19.00	3.53	94.2	21.70	387.89	494.95	248.79	430.75	19.51	336.98	341.17	171.49	330.79
9.6	7.6	9	0.62	0.50	0.40	19.00	3.53	95.5	21.70	393.34	496.78	249.71	516.52	19.68	341.92	343.87	172.85	421.33
9.7	7.7	9	0.62	0.50	0.40	19.00	3.53	96.8	21.70	398.80	498.62	250.63	603.05	19.85	346.91	346.56	174.20	512.63
9.8	7.8	9	0.62	0.50	0.40	19.00	3.52	98.0	21.70	404.25	500.45	251.55	690.34	20.02	351.95	349.25	175.55	604.70
9.9	7.9	9	0.62	0.50	0.40	19.00	3.52	99.3	21.70	409.70	502.28	252.47	841.63	20.20	357.02	351.93	176.90	760.78
10.0	8.0	9	0.62	0.50	0.40	19.00	3.52	100.5	21.70	415.16	504.11	253.40	994.19	20.37	362.14	354.60	178.24	918.14
10.1	8.1	9	0.62	0.50	0.40	19.00	3.51	101.8	21.70	420.61	505.95	254.32	1148.02	20.54	367.30	357.27	179.58	1076.78
10.2	8.2	9	0.62	0.50	0.40	19.00	3.51	103.0	21.70	426.07	507.78	255.24	1303.11	20.71	372.51	359.92	180.92	1236.69
10.3	8.3	9	0.62	0.50	0.40	19.00	3.51	104.3	21.70	431.52	509.61	256.16	1459.46	20.88	377.76	362.58	182.25	1397.86
10.4	8.4	9	0.62	0.50	0.40	19.00	3.50	105.6	21.70	436.97	511.45	257.08	1617.08	21.06	383.05	365.22	183.58	1560.31
10.5	8.5	9	0.62	0.50	0.40	19.00	3.50	106.8	21.70	442.43	513.28	258.00	1775.94	21.23	388.38	367.86	184.90	1724.03
10.6	8.6	10	0.70	0.50	0.73	33.10	27.59	108.1	38.66	452.14	2925.98	1470.76	1939.77	38.66	398.10	2925.98	1470.76	1892.78
10.7	8.7	10	0.70	0.50	0.73	33.10	27.57	109.3	39.01	461.95	2950.19	1482.93	2023.32	39.01	407.91	2950.19	1482.93	1976.32
10.8	8.8	10	0.70	0.50	0.73	33.10	27.55	110.6	39.36	471.84	2974.36	1495.08	2107.43	39.36	417.80	2974.36	1495.08	2060.44
10.9	8.9	11	0.70	0.50	0.86	37.70	44.69	111.8	46.83	483.61	4867.10	2446.47	2193.67	46.83	429.57	4867.10	2446.47	2146.67
11.0	9.0	11	0.70	0.50	0.86	37.70	44.66	113.1	47.24	495.49	4906.44	2466.24	2217.23	47.24	441.44	4906.44	2466.24	2170.23
11.1	9.1	11	0.70	0.50	0.86	37.70	44.63	114.4	47.65	507.46	4945.69	2485.98	2240.85	47.65	453.42	4945.69	2485.98	2193.85
11.2	9.2	11	0.70	0.50	0.86	37.70	44.60	115.6	48.07	519.54	4984.87	2505.67	2264.53	48.07	465.50	4984.87	2505.67	2217.53
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	48.48	531.73	5023.96	2525.32	2288.26	48.48	477.68	5023.96	2525.32	2241.27
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	48.89	544.01	5062.97	2544.93	2312.06	48.89	489.97	5062.97	2544.93	2265.06
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	49.30	556.40	5101.90	2564.49	2335.91	49.30	502.36	5101.90	2564.49	2288.91
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	49.71	568.89	5140.74	2584.02	2359.82	49.71	514.85	5140.74	2584.02	2312.82
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	50.12	581.49	5179.50	2603.50	2383.78	50.12	527.45	5179.50	2603.50	2336.79
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	50.53	594.19	5218.18	2622.94	2407.81	50.53	540.14	5218.18	2622.94	2360.81
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.94	606.99	5256.76	2642.34	2431.88	50.94	552.95	5256.76	2642.34	2384.89
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	51.35	619.90	5295.27	2661.69	2456.02	51.35	565.85	5295.27	2661.69	2409.03
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	51.76	632.90	5333.68	2681.00	2480.21	51.76	578.86	5333.68	2681.00	2433.22
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	52.17	646.01	5372.01	2700.27	2504.46	52.17	591.97	5372.01	2700.27	2457.46
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	52.58	659.23	5410.25	2719.49	2528.76	52.58	605.19	5410.25	2719.49	2481.77
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.99	672.55	5448.40	2738.67	2553.12	52.99	618.50	5448.40	2738.67	2506.12
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	53.40	685.97	5486.46	2757.80	2577.53	53.40	631.92	5486.46	2757.80	2530.54
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	53.81	699.49	5524.43	2776.88	2602.00	53.81	645.45	5524.43	2776.88	2555.01
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	54.22	713.12	5562.31	2795.92	2626.52	54.22	659.07	5562.31	2795.92	2579.53
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	54.63	726.85	5600.10	2814.92	2651.10	54.63	672.80	5600.10	2814.92	2604.10
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	55.04	740.68	5637.80	2833.87	2675.73	55.04	686.64	5637.80	2833.87	2628.73
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	55.45	754.62	5675.40	2852.77	2700.41	55.45	700.57	5675.40	2852.77	2653.42
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	55.86	768.66	5712.91	2871.62	2725.15	55.86	714.61	5712.91	2871.62	2678.15
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	56.27	782.80	5750.32	2890.43	2749.94	56.27	728.76	5750.32	2890.43	2702.94
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	56.68	797.04	5787.64	2909.18	2774.78	56.68	743.00	5787.64	2909.18	2727.79
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	57.09	811.39	5824.86	2927.89	2799.68	57.09	757.35	5824.86	2927.89	2752.68
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	57.50	825.84	5861.99	2946.56	2824.62	57.50	771.80	5861.99	2946.56	2777.63
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	57.91	840.40	5899.01	2965.17	2849.62	57.91	786.36	5899.01	2965.17	2802.63

13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	58.32	855.06	5935.94	2983.73	2874.68	58.32	801.01	5935.94	2983.73	2827.68
13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	58.73	869.82	5972.78	3002.24	2899.78	58.73	815.78	5972.78	3002.24	2852.78
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	59.14	884.68	6009.51	3020.71	2925.01	59.14	830.64	6009.51	3020.71	2878.02
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	59.55	899.65	6046.14	3039.12	2950.38	59.55	845.61	6046.14	3039.12	2903.39
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.96	914.72	6082.67	3057.48	2975.89	59.96	860.68	6082.67	3057.48	2928.89
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	60.37	929.89	6119.10	3075.79	3001.53	60.37	875.85	6119.10	3075.79	2954.53
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	60.78	945.17	6155.42	3094.05	3027.31	60.78	891.13	6155.42	3094.05	2980.32
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	61.19	960.55	6191.64	3112.26	3053.23	61.19	906.51	6191.64	3112.26	3006.24
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	61.60	976.03	6227.76	3130.41	3079.30	61.60	921.99	6227.76	3130.41	3032.31
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	62.01	991.62	6263.77	3148.52	3105.51	62.01	937.58	6263.77	3148.52	3058.52
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.43	1007.31	6299.68	3166.57	3131.88	62.43	953.27	6299.68	3166.57	3084.88
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.84	1023.10	6335.48	3184.56	3158.39	62.84	969.06	6335.48	3184.56	3111.39
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	63.25	1039.00	6373.56	3203.70	3185.05	63.25	984.95	6373.56	3203.70	3138.06
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.66	1055.00	6411.59	3222.82	3211.79	63.66	1000.95	6411.59	3222.82	3164.80
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	64.07	1071.10	6449.58	3241.91	3238.61	64.07	1017.05	6449.58	3241.91	3191.61
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.48	1087.30	6487.53	3260.99	3265.50	64.48	1033.26	6487.53	3260.99	3218.50
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.89	1103.61	6525.44	3280.04	3202.48	64.89	1049.57	6525.44	3280.04	3155.49
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	65.30	1120.02	6563.30	3299.08	3139.06	65.30	1065.98	6563.30	3299.08	3092.07
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.71	1136.53	6601.13	3318.09	3075.23	65.71	1082.49	6601.13	3318.09	3028.23
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	66.12	1153.15	6638.92	3337.08	3010.99	66.12	1099.11	6638.92	3337.08	2963.99
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.53	1169.87	6676.66	3356.06	3038.25	66.53	1115.83	6676.66	3356.06	2991.25
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.94	1186.70	6714.37	3375.01	3065.58	66.94	1132.65	6714.37	3375.01	3018.59
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	67.35	1203.62	6752.03	3393.94	3092.99	67.35	1149.58	6752.03	3393.94	3046.00
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.76	1220.65	6789.65	3412.85	3120.48	67.76	1166.61	6789.65	3412.85	3073.48
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	68.17	1237.78	6827.24	3431.74	3148.04	68.17	1183.74	6827.24	3431.74	3101.04
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.58	1255.02	6864.78	3450.61	3175.67	68.58	1200.98	6864.78	3450.61	3128.68
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.49	1269.72	4244.15	2133.34	3201.08	58.49	1215.68	4244.15	2133.34	3154.09
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.84	1284.51	4267.27	2144.96	3316.53	58.84	1230.46	4267.27	2144.96	3269.54
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	59.18	1299.38	4290.36	2156.57	3432.53	59.18	1245.34	4290.36	2156.57	3385.53
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.53	1314.34	4313.43	2168.17	3549.07	59.53	1260.30	4313.43	2168.17	3502.07
16.7	14.7	13	0.70	0.50	0.86	37.70	42.94	184.7	70.63	1332.10	7051.88	3544.66	3668.50	70.63	1278.05	7051.88	3544.66	3621.51
16.8	14.8	13	0.70	0.50	0.86	37.70	42.92	186.0	71.04	1349.95	7089.17	3563.41	3696.59	71.04	1295.91	7089.17	3563.41	3649.59
16.9	14.9	13	0.70	0.50	0.86	37.70	42.89	187.2	71.45	1367.91	7126.43	3582.14	3724.74	71.45	1313.86	7126.43	3582.14	3677.75
17.0	15.0	13	0.70	0.50	0.86	37.70	42.87	188.5	71.86	1385.97	7163.65	3600.84	3752.97	71.86	1331.93	7163.65	3600.84	3705.98

1.1.6.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.6**	**19.35**			0.70	0.50	0.00
2	**1.6**	**2.0**	**18.33**	**22**	**35**	0.62	0.50	0.40
3	**2.0**	**3.5**	**19.35**			0.70	0.50	0.00
4	**3.5**	**4.2**	**19.35**	**40**		0.70	0.50	0.83
5	**4.2**	**4.8**	**18.33**	**22**	**25**	0.70	0.50	0.40
6	**4.8**	**5.8**	**19.35**			0.70	0.50	0.00
7	**5.8**	**7.8**	**18.33**	**22**	**35**	0.62	0.50	0.40
8	**7.8**	**8.7**	**19.35**			0.70	0.50	0.00
9	**8.7**	**10.5**	**18.33**	**22**	**35**	0.62	0.50	0.40
10	**10.5**	**10.8**	**19.35**			0.70	0.50	0.00
11	**10.8**	**16.2**	**19.35**	**41**		0.70	0.50	0.86
12	**16.2**	**16.6**	**19.35**			0.70	0.50	0.00
13	**16.6**	**18.7**	**19.35**	**41**		0.70	0.50	0.86
14	**18.7**	**18.9**	**19.35**			0.70	0.50	0.00
15	**18.9**	**21.2**	**19.35**	**41**		0.70	0.50	0.86
16	**21.2**	**22.3**	**19.35**			0.70	0.50	0.00
17	**22.3**	**23.3**	**19.35**	**41**		0.70	0.50	0.86
18	**23.3**	**23.6**	**19.35**			0.70	0.50	0.00
19	**23.6**	**23.8**	**19.35**	**41**		0.70	0.50	0.86
20	**23.8**	**25.0**	**19.35**			0.70	0.50	0.00

1.1.6.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	7410	-

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	-2.83
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	-5.65
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	-8.48
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	-11.31
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	-14.14
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	117.80
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	252.68
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	390.50
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	531.26
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	674.95
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	821.58
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	971.16
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	991.76
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	1012.51
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	1033.40
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	45.2	18.06	6.81	1769.53	2001.29	1060.34
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	48.1	18.46	13.77	1808.12	2044.93	952.79
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	50.9	18.85	20.87	1846.71	2088.58	842.57
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	53.7	19.24	28.13	1885.30	2132.22	705.41
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	56.5	19.64	35.53	1923.89	2175.87	565.43
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	59.4	20.03	43.08	1962.48	2219.51	422.65
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	62.2	20.43	50.79	2001.07	2263.15	277.06
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	65.0	17.50	57.38	307.70	347.99	127.56

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	67.9	17.50	63.98	309.53	350.07	107.04
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	70.7	17.50	70.58	311.36	352.14	86.38
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	73.5	17.50	77.17	313.19	354.21	65.57
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	76.3	17.50	83.77	315.03	356.29	44.63
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	79.2	17.50	90.37	316.86	358.36	23.55
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	82.0	0.00	90.37	0.00	0.00	29.19
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	84.8	0.00	90.37	0.00	0.00	59.10
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	87.7	0.00	90.37	0.00	0.00	89.15
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	90.5	0.00	90.37	0.00	0.00	119.34
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	93.3	0.00	90.37	0.00	0.00	149.67
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	96.1	0.00	90.37	0.00	0.00	180.14
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	99.0	0.00	90.37	0.00	0.00	210.75
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	101.8	0.00	90.37	0.00	0.00	241.50
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	104.6	0.00	90.37	0.00	0.00	272.39
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	107.4	0.00	90.37	0.00	0.00	303.42
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	110.3	21.70	98.55	428.04	484.11	341.70
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	113.1	21.70	106.73	429.88	486.18	347.52
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	115.9	21.70	114.91	431.71	488.25	353.34
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	118.8	21.70	123.09	433.54	490.32	359.17
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	121.6	21.70	131.27	435.38	492.40	364.99
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	124.4	21.70	139.45	437.21	494.47	370.81
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	127.2	21.70	147.63	439.04	496.54	376.63
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	130.1	21.70	155.81	440.87	498.62	382.45
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	132.9	21.70	164.00	442.71	500.69	388.27
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	135.7	21.70	172.18	444.54	502.76	394.10
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	138.5	21.70	180.36	446.37	504.84	364.53
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	141.4	21.70	188.54	448.21	506.91	334.82
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	144.2	21.70	196.72	450.04	508.98	304.97
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	147.0	21.70	204.90	451.87	511.06	274.98
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	149.9	21.70	213.08	453.71	513.13	244.85
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	152.7	21.70	221.26	455.54	515.20	214.58
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	155.5	21.70	229.44	457.37	517.27	184.18
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	158.3	21.70	237.62	459.20	519.35	153.63
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	161.2	21.70	245.80	461.04	521.42	122.94
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	164.0	21.70	253.98	462.87	523.49	128.83
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	166.8	0.00	253.98	0.00	0.00	127.61
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	169.6	0.00	253.98	0.00	0.00	161.78
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	172.5	0.00	253.98	0.00	0.00	196.09
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	175.3	0.00	253.98	0.00	0.00	230.54
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	178.1	0.00	253.98	0.00	0.00	265.13
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	181.0	0.00	253.98	0.00	0.00	299.86
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	183.8	0.00	253.98	0.00	0.00	334.72
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	186.6	0.00	253.98	0.00	0.00	369.73
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	189.4	0.00	253.98	0.00	0.00	404.88
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	192.3	21.70	262.16	482.12	545.26	447.28
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	195.1	21.70	270.34	483.95	547.34	453.10
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	197.9	21.70	278.53	485.78	549.41	458.92

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	200.7	21.70	286.71	487.62	551.48	464.75
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	203.6	21.70	294.89	489.45	553.55	470.57
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	206.4	21.70	303.07	491.28	555.63	476.39
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	209.2	21.70	311.25	493.12	557.70	482.21
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	212.1	21.70	319.43	494.95	559.77	488.03
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	214.9	21.70	327.61	496.78	561.85	454.62
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	217.7	21.70	335.79	498.62	563.92	421.07
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	220.5	21.70	343.97	500.45	565.99	387.39
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	223.4	21.70	352.15	502.28	568.07	729.92
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	226.2	21.70	360.33	504.11	570.14	1075.62
10.1	8.1	9	0.62	0.50	0.40	19.00	3.57	229.0	21.70	368.51	505.95	572.21	1424.47
10.2	8.2	9	0.62	0.50	0.40	19.00	3.57	231.8	21.70	376.69	507.78	574.29	1776.48
10.3	8.3	9	0.62	0.50	0.40	19.00	3.57	234.7	21.70	384.87	509.61	576.36	2131.65
10.4	8.4	9	0.62	0.50	0.40	19.00	3.57	237.5	21.70	393.06	511.45	578.43	2489.97
10.5	8.5	9	0.62	0.50	0.40	19.00	3.57	240.3	21.70	401.24	513.28	580.50	2851.45
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	243.2	0.00	401.24	0.00	0.00	3208.98
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	246.0	0.00	401.24	0.00	0.00	3608.74
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	248.8	0.00	401.24	0.00	0.00	4011.65
10.9	8.9	11	0.70	0.50	0.86	37.70	45.38	251.6	46.83	418.89	4941.77	5589.02	4433.06
11.0	9.0	11	0.70	0.50	0.86	37.70	45.38	254.5	47.24	436.70	4985.07	5637.98	4481.38
11.1	9.1	11	0.70	0.50	0.86	37.70	45.38	257.3	47.65	454.67	5028.36	5686.94	4529.67
11.2	9.2	11	0.70	0.50	0.86	37.70	45.38	260.1	48.07	472.79	5071.65	5735.90	4577.93
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	48.48	491.06	5114.94	5784.86	4626.16
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	48.89	509.49	5158.23	5833.82	4674.35
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	49.30	528.08	5201.52	5882.79	4722.50
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	49.71	546.82	5244.82	5931.75	4770.61
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	50.12	565.71	5286.16	5978.51	4818.67
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	50.53	584.76	5327.47	6025.22	4866.83
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.94	603.96	5368.73	6071.89	4915.09
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	51.35	623.32	5409.95	6118.51	4963.44
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	51.76	642.83	5451.13	6165.08	5011.90
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	52.17	662.50	5492.26	6211.61	5060.45
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	52.58	682.32	5533.36	6258.08	5109.09
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.99	702.30	5574.40	6304.50	5157.84
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	53.40	722.43	5615.41	6350.88	5206.68
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	53.81	742.71	5656.37	6397.20	5255.62
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	54.22	763.15	5697.29	6443.48	5304.65
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	54.63	783.75	5738.16	6489.70	5353.78
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	55.04	804.50	5778.98	6535.88	5403.01
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	55.45	825.40	5819.77	6582.00	5452.33
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	55.86	846.46	5860.50	6628.07	5501.75
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	56.27	867.67	5901.19	6674.09	5551.26
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	56.68	889.04	5941.84	6720.06	5600.87
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	57.09	910.56	5982.43	6765.97	5650.57
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	57.50	932.24	6022.99	6811.84	5700.37
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	57.91	954.07	6063.49	6857.65	5750.26
13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	58.32	976.06	6103.95	6903.40	5800.24

13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	58.73	998.20	6144.36	6949.11	5850.32
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	59.14	1020.50	6184.72	6994.76	5900.49
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	59.55	1042.95	6225.04	7040.35	5950.75
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.96	1065.56	6265.31	7085.89	6001.11
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	60.37	1088.32	6305.52	7131.38	6051.56
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	60.78	1111.23	6345.69	7176.81	6102.10
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	61.19	1134.30	6385.81	7222.19	6152.74
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	61.60	1157.53	6425.89	7267.51	6203.46
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	62.01	1180.91	6465.91	7312.77	6254.28
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.43	1204.44	6505.88	7357.98	6305.19
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.84	1228.13	6545.80	7403.13	6356.19
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	63.25	1251.97	6585.67	7448.22	6407.29
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.66	1275.97	6625.49	7493.26	6458.47
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	64.07	1300.12	6665.26	7538.24	6509.74
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.48	1324.43	6704.98	7583.16	6561.11
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.89	1348.89	6744.65	7628.02	6068.90
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	65.30	1373.51	6784.27	7672.82	5573.81
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.71	1398.28	6823.83	7717.57	5075.83
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	66.12	1423.20	6863.34	7762.25	4574.98
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.53	1448.28	6902.80	7806.88	4626.79
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.94	1473.52	6942.20	7851.45	4678.69
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	67.35	1498.91	6981.55	7895.95	4730.68
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.76	1524.45	7020.85	7940.40	4782.76
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	68.17	1550.15	7060.10	7984.78	4834.92
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.58	1576.01	7099.29	8029.10	4887.18
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1576.01	0.00	0.00	4916.90
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1576.01	0.00	0.00	5490.24
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1576.01	0.00	0.00	6066.51
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1576.01	0.00	0.00	6645.70
16.7	14.7	13	0.70	0.50	0.86	37.70	44.42	415.6	70.63	1602.63	7294.41	8249.79	7250.97
16.8	14.8	13	0.70	0.50	0.86	37.70	44.39	418.5	71.04	1629.42	7333.27	8293.73	7303.75
16.9	14.9	13	0.70	0.50	0.86	37.70	44.37	421.3	71.45	1656.35	7372.07	8337.62	7356.61
17.0	15.0	13	0.70	0.50	0.86	37.70	44.35	424.1	71.86	1683.44	7410.82	8381.44	7409.56

1.1.6.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	5276	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	-1.96
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	-3.93
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	-5.89
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	-7.85
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	-9.82
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	81.81
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	175.47
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	271.18
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	368.93
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	468.72
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	570.55
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	674.42
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	688.73
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	703.13
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	717.64
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	31.4	18.06	5.67	1769.53	1389.79	737.17
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	33.4	18.46	11.47	1808.12	1420.09	663.32
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	35.3	18.85	17.40	1846.71	1450.40	587.64
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	37.3	19.24	23.44	1885.30	1480.71	493.26
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	39.3	19.64	29.61	1923.89	1511.02	396.95
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	41.2	20.03	35.90	1962.48	1541.33	298.71
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	43.2	20.43	42.32	2001.07	1571.63	198.53
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	45.2	17.50	47.82	307.70	241.66	95.52

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	47.1	17.50	53.32	309.53	243.10	82.06
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	49.1	17.50	58.81	311.36	244.54	68.51
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	51.1	17.50	64.31	313.19	245.98	54.86
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	53.0	17.50	69.81	315.03	247.42	41.11
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	55.0	17.50	75.31	316.86	248.86	27.27
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	56.9	0.00	75.31	0.00	0.00	31.18
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	58.9	0.00	75.31	0.00	0.00	51.95
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	60.9	0.00	75.31	0.00	0.00	72.82
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	62.8	0.00	75.31	0.00	0.00	93.79
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	64.8	0.00	75.31	0.00	0.00	114.85
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	66.8	0.00	75.31	0.00	0.00	136.01
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	68.7	0.00	75.31	0.00	0.00	157.27
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	70.7	0.00	75.31	0.00	0.00	178.62
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	72.6	0.00	75.31	0.00	0.00	200.07
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	74.6	0.00	75.31	0.00	0.00	221.62
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	76.6	21.70	82.12	428.04	336.18	249.19
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	78.5	21.70	88.94	429.88	337.62	254.22
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	80.5	21.70	95.76	431.71	339.06	259.26
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	82.5	21.70	102.58	433.54	340.50	264.29
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	84.4	21.70	109.39	435.38	341.94	269.32
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	86.4	21.70	116.21	437.21	343.38	274.35
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	88.4	21.70	123.03	439.04	344.82	279.38
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	90.3	21.70	129.85	440.87	346.26	284.41
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	92.3	21.70	136.66	442.71	347.70	289.44
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	94.2	21.70	143.48	444.54	349.14	294.47
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	96.2	21.70	150.30	446.37	350.58	274.93
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	98.2	21.70	157.11	448.21	352.02	255.28
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	100.1	21.70	163.93	450.04	353.46	235.54
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	102.1	21.70	170.75	451.87	354.90	215.70
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	104.1	21.70	177.57	453.71	356.34	195.77
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	106.0	21.70	184.38	455.54	357.78	175.74
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	108.0	21.70	191.20	457.37	359.22	155.61
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	110.0	21.70	198.02	459.20	360.66	135.39
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	111.9	21.70	204.84	461.04	362.10	115.06
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	113.9	21.70	211.65	462.87	363.54	120.14
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	115.8	0.00	211.65	0.00	0.00	119.29
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	117.8	0.00	211.65	0.00	0.00	143.02
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	119.8	0.00	211.65	0.00	0.00	166.85
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	121.7	0.00	211.65	0.00	0.00	190.77
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	123.7	0.00	211.65	0.00	0.00	214.79
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	125.7	0.00	211.65	0.00	0.00	238.91
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	127.6	0.00	211.65	0.00	0.00	263.12
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	129.6	0.00	211.65	0.00	0.00	287.43
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	131.6	0.00	211.65	0.00	0.00	311.84
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	133.5	21.70	218.47	482.12	378.65	342.27
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	135.5	21.70	225.29	483.95	380.09	347.30
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	137.4	21.70	232.10	485.78	381.53	352.33

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	139.4	21.70	238.92	487.62	382.97	357.37
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	141.4	21.70	245.74	489.45	384.41	362.40
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	143.3	21.70	252.56	491.28	385.85	367.43
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	145.3	21.70	259.37	493.12	387.29	372.46
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	147.3	21.70	266.19	494.95	388.73	377.49
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	149.2	21.70	273.01	496.78	390.17	355.28
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	151.2	21.70	279.83	498.62	391.61	332.97
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	153.2	21.70	286.64	500.45	393.05	310.56
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	155.1	21.70	293.46	502.28	394.49	548.36
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	157.1	21.70	300.28	504.11	395.93	788.21
10.1	8.1	9	0.62	0.50	0.40	19.00	3.56	159.0	21.70	307.09	505.95	397.37	1030.13
10.2	8.2	9	0.62	0.50	0.40	19.00	3.56	161.0	21.70	313.91	507.78	398.81	1274.10
10.3	8.3	9	0.62	0.50	0.40	19.00	3.56	163.0	21.70	320.73	509.61	400.25	1520.12
10.4	8.4	9	0.62	0.50	0.40	19.00	3.56	164.9	21.70	327.55	511.45	401.69	1768.19
10.5	8.5	9	0.62	0.50	0.40	19.00	3.56	166.9	21.70	334.36	513.28	403.13	2018.31
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	168.9	0.00	334.36	0.00	0.00	2264.54
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	170.8	0.00	334.36	0.00	0.00	2540.05
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	172.8	0.00	334.36	0.00	0.00	2817.70
10.9	8.9	11	0.70	0.50	0.86	37.70	45.19	174.8	46.83	349.08	4921.65	3865.46	3110.27
11.0	9.0	11	0.70	0.50	0.86	37.70	45.17	176.7	47.24	363.92	4962.44	3897.50	3144.79
11.1	9.1	11	0.70	0.50	0.86	37.70	45.15	178.7	47.65	378.89	5003.18	3929.49	3179.38
11.2	9.2	11	0.70	0.50	0.86	37.70	45.13	180.6	48.07	393.99	5043.86	3961.44	3214.05
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	48.48	409.22	5084.49	3993.35	3248.80
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	48.89	424.58	5125.06	4025.22	3283.63
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	49.30	440.06	5165.58	4057.04	3318.53
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	49.71	455.68	5206.04	4088.81	3353.52
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	50.12	471.42	5246.44	4120.55	3388.58
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	50.53	487.30	5286.79	4152.23	3423.72
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.94	503.30	5327.07	4183.87	3458.94
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	51.35	519.43	5367.31	4215.47	3494.24
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	51.76	535.69	5407.48	4247.02	3529.61
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	52.17	552.08	5447.59	4278.53	3565.06
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	52.58	568.60	5487.64	4309.99	3600.59
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.99	585.25	5527.64	4341.40	3636.19
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	53.40	602.02	5567.57	4372.76	3671.87
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	53.81	618.93	5607.45	4404.08	3707.62
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	54.22	635.96	5647.26	4435.35	3743.45
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	54.63	653.12	5687.01	4466.57	3779.35
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	55.04	670.41	5726.71	4497.74	3815.33
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	55.45	687.83	5766.33	4528.87	3851.39
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	55.86	705.38	5805.90	4559.94	3887.52
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	56.27	723.06	5845.40	4590.97	3923.72
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	56.68	740.87	5884.84	4621.95	3960.00
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	57.09	758.80	5924.22	4652.87	3996.35
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	57.50	776.87	5963.53	4683.75	4032.77
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	57.91	795.06	6002.78	4714.57	4069.27
13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	58.32	813.38	6041.97	4745.35	4105.84

13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	58.73	831.84	6081.08	4776.07	4142.49
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	59.14	850.42	6120.14	4806.74	4179.20
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	59.55	869.13	6159.12	4837.36	4215.99
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.96	887.96	6198.04	4867.93	4252.85
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	60.37	906.93	6236.89	4898.44	4289.79
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	60.78	926.03	6275.68	4928.91	4326.79
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	61.19	945.25	6314.40	4959.31	4363.87
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	61.60	964.61	6353.04	4989.67	4401.01
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	62.01	984.09	6391.62	5019.97	4438.23
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.43	1003.70	6430.13	5050.22	4475.52
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.84	1023.44	6468.58	5080.41	4512.88
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	63.25	1043.31	6506.95	5110.54	4550.31
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.66	1063.31	6545.25	5140.62	4587.80
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	64.07	1083.43	6583.48	5170.65	4625.37
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.48	1103.69	6621.63	5200.62	4663.01
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.89	1124.07	6659.72	5230.53	4328.56
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	65.30	1144.59	6697.73	5260.39	3992.21
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.71	1165.23	6735.68	5290.19	3653.96
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	66.12	1186.00	6773.54	5319.93	3313.82
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.53	1206.90	6811.34	5349.61	3351.80
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.94	1227.93	6849.06	5379.24	3389.85
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	67.35	1249.09	6886.70	5408.81	3427.96
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.76	1270.38	6924.28	5438.31	3466.14
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	68.17	1291.79	6961.77	5467.76	3504.39
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.58	1313.34	6999.19	5497.15	3542.71
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1313.34	0.00	0.00	3562.24
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1313.34	0.00	0.00	3953.88
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1313.34	0.00	0.00	4347.45
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1313.34	0.00	0.00	4742.94
16.7	14.7	13	0.70	0.50	0.86	37.70	43.75	288.6	70.63	1335.53	7185.14	5643.19	5159.64
16.8	14.8	13	0.70	0.50	0.86	37.70	43.72	290.6	71.04	1357.85	7222.09	5672.22	5198.35
16.9	14.9	13	0.70	0.50	0.86	37.70	43.69	292.6	71.45	1380.29	7258.97	5701.18	5237.12
17.0	15.0	13	0.70	0.50	0.86	37.70	43.66	294.5	71.86	1402.87	7295.76	5730.08	5275.96

1.1.6.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	3524	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	-1.26
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	-2.51
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	-3.77
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	-5.03
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	-6.28
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	52.36
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	112.30
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	173.55
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	236.11
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	299.98
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	365.15
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	431.63
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	440.78
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	450.00
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	459.29
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	20.1	18.06	4.54	1769.53	889.46	472.58
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	21.4	18.46	9.18	1808.12	908.86	426.12
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	22.6	18.85	13.92	1846.71	928.26	378.51
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	23.9	19.24	18.75	1885.30	947.65	318.95
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	25.1	19.64	23.69	1923.89	967.05	258.17
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	26.4	20.03	28.72	1962.48	986.45	196.17
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	27.6	20.43	33.86	2001.07	1005.85	132.95
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	28.9	17.50	38.25	307.70	154.66	67.78

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	30.2	17.50	42.65	309.53	155.59	59.94
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	31.4	17.50	47.05	311.36	156.51	52.03
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	32.7	17.50	51.45	313.19	157.43	44.06
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	33.9	17.50	55.85	315.03	158.35	36.02
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	35.2	17.50	60.25	316.86	159.27	27.93
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	36.4	0.00	60.25	0.00	0.00	30.43
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	37.7	0.00	60.25	0.00	0.00	43.73
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	39.0	0.00	60.25	0.00	0.00	57.08
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	40.2	0.00	60.25	0.00	0.00	70.50
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	41.5	0.00	60.25	0.00	0.00	83.98
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	42.7	0.00	60.25	0.00	0.00	97.53
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	44.0	0.00	60.25	0.00	0.00	111.13
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	45.2	0.00	60.25	0.00	0.00	124.80
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	46.5	0.00	60.25	0.00	0.00	138.52
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	47.8	0.00	60.25	0.00	0.00	152.32
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	49.0	21.70	65.70	428.04	215.16	170.91
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	50.3	21.70	71.15	429.88	216.08	175.08
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	51.5	21.70	76.61	431.71	217.00	179.25
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	52.8	21.70	82.06	433.54	217.92	183.42
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	54.0	21.70	87.52	435.38	218.84	187.58
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	55.3	21.70	92.97	437.21	219.76	191.75
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	56.5	21.70	98.42	439.04	220.69	195.92
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	57.8	21.70	103.88	440.87	221.61	200.09
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	59.1	21.70	109.33	442.71	222.53	204.26
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	60.3	21.70	114.78	444.54	223.45	208.42
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	61.6	21.70	120.24	446.37	224.37	196.86
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	62.8	21.70	125.69	448.21	225.29	185.24
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	64.1	21.70	131.15	450.04	226.21	173.55
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	65.3	21.70	136.60	451.87	227.14	161.81
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	66.6	21.70	142.05	453.71	228.06	150.00
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	67.9	21.70	147.51	455.54	228.98	138.13
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	69.1	21.70	152.96	457.37	229.90	126.19
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	70.4	21.70	158.41	459.20	230.82	114.20
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	71.6	21.70	163.87	461.04	231.74	102.14
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	72.9	21.70	169.32	462.87	232.66	106.34
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	74.1	0.00	169.32	0.00	0.00	105.80
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	75.4	0.00	169.32	0.00	0.00	120.98
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	76.7	0.00	169.32	0.00	0.00	136.23
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	77.9	0.00	169.32	0.00	0.00	151.54
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	79.2	0.00	169.32	0.00	0.00	166.91
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	80.4	0.00	169.32	0.00	0.00	182.35
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	81.7	0.00	169.32	0.00	0.00	197.85
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	82.9	0.00	169.32	0.00	0.00	213.40
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	84.2	0.00	169.32	0.00	0.00	229.03
8.8	6.8	9	0.62	0.50	0.40	19.00	3.56	85.5	21.70	174.78	482.12	242.34	249.45
8.9	6.9	9	0.62	0.50	0.40	19.00	3.55	86.7	21.70	180.23	483.95	243.26	253.62
9.0	7.0	9	0.62	0.50	0.40	19.00	3.55	88.0	21.70	185.68	485.78	244.18	257.79

9.1	7.1	9	0.62	0.50	0.40	19.00	3.55	89.2	21.70	191.14	487.62	245.10	261.96
9.2	7.2	9	0.62	0.50	0.40	19.00	3.54	90.5	21.70	196.59	489.45	246.02	266.12
9.3	7.3	9	0.62	0.50	0.40	19.00	3.54	91.7	21.70	202.05	491.28	246.95	270.29
9.4	7.4	9	0.62	0.50	0.40	19.00	3.54	93.0	21.70	207.50	493.12	247.87	274.46
9.5	7.5	9	0.62	0.50	0.40	19.00	3.53	94.2	21.70	212.95	494.95	248.79	278.63
9.6	7.6	9	0.62	0.50	0.40	19.00	3.53	95.5	21.70	218.41	496.78	249.71	265.36
9.7	7.7	9	0.62	0.50	0.40	19.00	3.53	96.8	21.70	223.86	498.62	250.63	252.03
9.8	7.8	9	0.62	0.50	0.40	19.00	3.52	98.0	21.70	229.31	500.45	251.55	238.64
9.9	7.9	9	0.62	0.50	0.40	19.00	3.52	99.3	21.70	234.77	502.28	252.47	389.93
10.0	8.0	9	0.62	0.50	0.40	19.00	3.52	100.5	21.70	240.22	504.11	253.40	542.49
10.1	8.1	9	0.62	0.50	0.40	19.00	3.51	101.8	21.70	245.68	505.95	254.32	696.32
10.2	8.2	9	0.62	0.50	0.40	19.00	3.51	103.0	21.70	251.13	507.78	255.24	851.41
10.3	8.3	9	0.62	0.50	0.40	19.00	3.51	104.3	21.70	256.58	509.61	256.16	1007.77
10.4	8.4	9	0.62	0.50	0.40	19.00	3.50	105.6	21.70	262.04	511.45	257.08	1165.38
10.5	8.5	9	0.62	0.50	0.40	19.00	3.50	106.8	21.70	267.49	513.28	258.00	1324.24
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	108.1	0.00	267.49	0.00	0.00	1479.62
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	109.3	0.00	267.49	0.00	0.00	1653.68
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	110.6	0.00	267.49	0.00	0.00	1829.06
10.9	8.9	11	0.70	0.50	0.86	37.70	44.69	111.8	46.83	279.26	4867.10	2446.47	2015.97
11.0	9.0	11	0.70	0.50	0.86	37.70	44.66	113.1	47.24	291.14	4906.44	2466.24	2039.53
11.1	9.1	11	0.70	0.50	0.86	37.70	44.63	114.4	47.65	303.11	4945.69	2485.98	2063.15
11.2	9.2	11	0.70	0.50	0.86	37.70	44.60	115.6	48.07	315.19	4984.87	2505.67	2086.83
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	48.48	327.38	5023.96	2525.32	2110.57
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	48.89	339.66	5062.97	2544.93	2134.36
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	49.30	352.05	5101.90	2564.49	2158.21
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	49.71	364.54	5140.74	2584.02	2182.12
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	50.12	377.14	5179.50	2603.50	2206.09
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	50.53	389.84	5218.18	2622.94	2230.11
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.94	402.64	5256.76	2642.34	2254.19
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	51.35	415.55	5295.27	2661.69	2278.32
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	51.76	428.55	5333.68	2681.00	2302.52
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	52.17	441.66	5372.01	2700.27	2326.76
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	52.58	454.88	5410.25	2719.49	2351.07
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.99	468.20	5448.40	2738.67	2375.42
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	53.40	481.62	5486.46	2757.80	2399.84
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	53.81	495.14	5524.43	2776.88	2424.30
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	54.22	508.77	5562.31	2795.92	2448.83
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	54.63	522.50	5600.10	2814.92	2473.40
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	55.04	536.33	5637.80	2833.87	2498.03
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	55.45	550.27	5675.40	2852.77	2522.72
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	55.86	564.31	5712.91	2871.62	2547.45
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	56.27	578.45	5750.32	2890.43	2572.24
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	56.68	592.69	5787.64	2909.18	2597.09
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	57.09	607.04	5824.86	2927.89	2621.98
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	57.50	621.50	5861.99	2946.56	2646.93
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	57.91	636.05	5899.01	2965.17	2671.93
13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	58.32	650.71	5935.94	2983.73	2696.98

13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	58.73	665.47	5972.78	3002.24	2722.08
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	59.14	680.33	6009.51	3020.71	2747.32
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	59.55	695.30	6046.14	3039.12	2772.69
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.96	710.37	6082.67	3057.48	2798.19
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	60.37	725.54	6119.10	3075.79	2823.83
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	60.78	740.82	6155.42	3094.05	2849.61
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	61.19	756.20	6191.64	3112.26	2875.54
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	61.60	771.68	6227.76	3130.41	2901.61
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	62.01	787.27	6263.77	3148.52	2927.82
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.43	802.96	6299.68	3166.57	2954.18
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.84	818.75	6335.48	3184.56	2980.69
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	63.25	834.65	6373.56	3203.70	3007.36
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.66	850.65	6411.59	3222.82	3034.10
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	64.07	866.75	6449.58	3241.91	3060.91
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.48	882.95	6487.53	3260.99	3087.80
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.89	899.26	6525.44	3280.04	2881.13
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	65.30	915.67	6563.30	3299.08	2673.26
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.71	932.18	6601.13	3318.09	2464.21
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	66.12	948.80	6638.92	3337.08	2253.96
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.53	965.52	6676.66	3356.06	2281.22
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.94	982.35	6714.37	3375.01	2308.56
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	67.35	999.27	6752.03	3393.94	2335.97
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.76	1016.30	6789.65	3412.85	2363.45
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	68.17	1033.43	6827.24	3431.74	2391.01
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.58	1050.67	6864.78	3450.61	2418.64
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	1050.67	0.00	0.00	2431.28
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	1050.67	0.00	0.00	2677.53
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	1050.67	0.00	0.00	2925.03
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	1050.67	0.00	0.00	3173.78
16.7	14.7	13	0.70	0.50	0.86	37.70	42.94	184.7	70.63	1068.42	7051.88	3544.66	3439.22
16.8	14.8	13	0.70	0.50	0.86	37.70	42.92	186.0	71.04	1086.28	7089.17	3563.41	3467.30
16.9	14.9	13	0.70	0.50	0.86	37.70	42.89	187.2	71.45	1104.23	7126.43	3582.14	3495.46
17.0	15.0	13	0.70	0.50	0.86	37.70	42.87	188.5	71.86	1122.30	7163.65	3600.84	3523.69

1.2 Calcolo per sollecitazioni di sfilamento

1.2.1 Calcolo del carico limite con riferimento alla prova CPTu8

1.2.1.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.4	19.35	34		0.70	0.50	0.67
2	2.4	4.4	19.35	34		0.70	0.50	0.67
3	4.4	5.2	18.33	22	25	0.70	0.50	0.40
4	5.2	5.9	19.35	35		0.70	0.50	0.70
5	5.9	9.8	18.33	22	30	0.66	0.50	0.40
6	9.8	10.6	19.35	34		0.70	0.50	0.67
7	10.6	11.6	18.33	22	50	0.50	0.50	0.40
8	11.6	11.8	19.35	36		0.70	0.50	0.73
9	11.8	13.4	19.35	41		0.70	0.50	0.86
10	13.4	14.5	19.35	36		0.70	0.50	0.73
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35	36		0.70	0.50	0.73
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35	36		0.70	0.50	0.73
15	26.0	27.9	18.33	22	175	0.35	0.50	0.40

1.2.1.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1929	1869

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	2.8	10.07	3.79	655.09	740.89	5.86	10.07	3.79	655.09	740.89	5.86
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	5.7	10.39	7.71	676.03	764.58	11.82	10.39	7.71	676.03	764.58	11.82
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	8.5	10.71	11.75	696.97	788.26	17.88	10.71	11.75	696.97	788.26	17.88
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	11.3	11.03	15.91	717.91	811.94	24.03	11.03	15.91	717.91	811.94	24.03
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	14.1	11.27	20.15	721.32	815.79	30.26	11.27	20.15	721.32	815.79	30.26
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	17.0	11.59	24.52	741.76	838.91	36.58	11.59	24.52	741.76	838.91	36.58
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	19.8	11.91	29.01	762.20	862.03	43.00	11.91	29.01	762.20	862.03	43.00
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	22.6	12.22	33.62	782.65	885.15	49.51	12.22	33.62	782.65	885.15	49.51
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	25.4	12.54	38.35	803.09	908.28	56.12	12.54	38.35	803.09	908.28	56.12
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	28.3	12.86	43.20	823.54	931.40	62.83	12.86	43.20	823.54	931.40	62.83
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	31.1	13.18	48.17	843.98	954.52	69.63	13.18	48.17	843.98	954.52	69.63
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	33.9	13.50	53.26	864.42	977.64	76.53	13.50	53.26	864.42	977.64	76.53
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	36.8	13.82	58.47	884.87	1000.76	83.53	13.82	58.47	884.87	1000.76	83.53
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	39.6	14.14	63.80	905.31	1023.88	90.62	14.14	63.80	905.31	1023.88	90.62
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	42.4	14.46	69.25	925.75	1047.00	97.81	14.46	69.25	925.75	1047.00	97.81
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	45.2	14.78	74.82	946.20	1070.13	105.09	14.78	74.82	946.20	1070.13	105.09
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	48.1	15.10	80.51	966.64	1093.25	112.48	15.10	80.51	966.64	1093.25	112.48
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	50.9	15.42	86.32	987.09	1116.37	119.95	15.42	86.32	987.09	1116.37	119.95
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	53.7	15.74	92.26	1007.53	1139.49	127.53	15.74	92.26	1007.53	1139.49	127.53
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	56.5	16.06	98.31	1027.97	1162.61	135.20	16.06	98.31	1027.97	1162.61	135.20
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	59.4	16.38	104.48	1048.42	1185.73	142.96	16.38	104.48	1048.42	1185.73	142.96
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	62.2	16.70	110.78	1068.86	1208.85	150.83	16.70	110.78	1068.86	1208.85	150.83

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	65.0	17.01	117.19	1089.30	1231.97	158.78	17.01	117.19	1089.30	1231.97	158.78
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	67.9	17.33	123.73	1109.75	1255.10	166.84	17.33	123.73	1109.75	1255.10	166.84
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	70.7	17.50	130.32	311.97	352.83	174.95	10.63	127.74	187.77	212.37	172.87
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	73.5	17.50	136.92	313.81	354.91	183.05	10.81	131.81	190.81	215.80	178.96
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	76.3	17.50	143.52	315.64	356.98	191.16	10.98	135.95	193.85	219.24	185.10
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	79.2	17.50	150.12	317.47	359.05	199.26	11.15	140.15	196.89	222.68	191.29
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	82.0	17.50	156.71	319.31	361.13	207.37	11.32	144.42	199.93	226.11	197.53
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	84.8	17.50	163.31	321.14	363.20	215.47	11.49	148.75	202.97	229.55	203.83
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	87.7	17.50	169.91	322.97	365.27	223.58	11.67	153.15	206.01	232.99	210.17
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	90.5	17.50	176.51	324.80	367.34	231.68	11.84	157.61	209.05	236.43	216.57
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	93.3	20.81	184.35	1462.27	1653.79	240.79	20.81	165.46	1462.27	1653.79	225.67
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	96.1	21.15	192.32	1485.69	1680.28	249.99	21.15	173.43	1485.69	1680.28	234.88
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	99.0	21.48	200.42	1509.11	1706.77	259.30	21.48	181.53	1509.11	1706.77	244.18
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	101.8	21.81	208.64	1532.54	1733.26	268.70	21.81	189.75	1532.54	1733.26	253.59
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	104.6	22.15	216.99	1555.96	1759.75	278.21	22.15	198.10	1555.96	1759.75	263.10
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	107.4	22.48	225.47	1579.38	1786.24	287.82	22.48	206.57	1579.38	1786.24	272.70
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	110.3	22.81	234.07	1602.81	1812.73	297.52	22.81	215.17	1602.81	1812.73	282.41
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	241.53	385.18	435.63	306.32	13.36	220.21	235.91	266.81	289.27
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	249.00	387.02	437.70	315.12	13.53	225.31	238.95	270.24	296.17
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	256.46	388.85	439.78	323.92	13.70	230.48	241.99	273.68	303.14
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	263.92	390.68	441.85	332.72	13.88	235.71	245.03	277.12	310.15
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	271.39	392.51	443.92	341.52	14.05	241.01	248.07	280.56	317.21
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	278.85	394.35	446.00	350.32	14.22	246.37	251.10	283.99	324.33
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	286.32	396.18	448.07	359.12	14.39	251.79	254.14	287.43	331.50
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	293.78	398.01	450.14	367.92	14.56	257.28	257.18	290.87	338.72
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	301.25	399.85	452.22	376.71	14.74	262.84	260.22	294.30	345.99
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	308.71	401.68	454.29	385.51	14.91	268.46	263.26	297.74	353.31
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	316.18	403.51	456.36	394.31	15.08	274.14	266.30	301.18	360.69
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	323.64	405.35	458.43	403.11	15.25	279.89	269.34	304.62	368.11
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	331.10	407.18	460.51	411.91	15.42	285.71	272.38	308.05	375.59
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	338.57	409.01	462.58	420.71	15.60	291.59	275.42	311.49	383.13
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	346.03	410.84	464.65	429.51	15.77	297.53	278.46	314.93	390.71
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	353.50	412.68	466.73	438.31	15.94	303.54	281.50	318.37	398.34
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	360.96	414.51	468.80	447.11	16.11	309.62	284.54	321.80	406.03
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	368.43	416.34	470.87	455.90	16.29	315.76	287.58	325.24	413.77
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	375.89	418.18	472.95	464.70	16.46	321.96	290.62	328.68	421.56
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	383.36	420.01	475.02	473.50	16.63	328.23	293.65	332.12	429.40
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	390.82	421.84	477.09	482.30	16.80	334.57	296.69	335.55	437.30
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	398.28	423.68	479.17	491.10	16.97	340.96	299.73	338.99	445.25
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	405.75	425.51	481.24	499.90	17.15	347.43	302.77	342.43	453.24
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	413.21	427.34	483.31	508.70	17.32	353.96	305.81	345.86	461.29
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	420.68	429.17	485.38	517.50	17.49	360.55	308.85	349.30	469.40
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	428.14	431.01	487.46	526.30	17.66	367.21	311.89	352.74	477.55
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	435.61	432.84	489.53	535.10	17.83	373.93	314.93	356.18	485.76
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	443.07	434.67	491.60	543.89	18.01	380.72	317.97	359.61	494.02
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	450.54	436.51	493.68	552.69	18.18	387.57	321.01	363.05	502.33
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	458.00	438.34	495.75	561.49	18.35	394.49	324.05	366.49	510.69

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	465.46	440.17	497.82	570.29	18.52	401.48	327.09	369.93	519.10
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	472.93	442.01	499.90	579.09	18.70	408.52	330.13	373.36	527.57
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	480.39	443.84	501.97	587.89	18.87	415.64	333.17	376.80	536.08
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	487.86	445.67	504.04	596.69	19.04	422.81	336.20	380.24	544.65
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	495.32	447.50	506.12	605.49	19.21	430.06	339.24	383.68	553.28
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	502.79	449.34	508.19	614.29	19.38	437.36	342.28	387.11	561.95
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	510.25	451.17	510.26	623.09	19.56	444.74	345.32	390.55	570.67
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	517.71	453.00	512.33	631.88	19.73	452.17	348.36	393.99	579.45
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	220.5	19.80	525.18	454.84	514.41	640.68	19.90	459.68	351.40	397.43	588.28
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	223.4	33.29	537.73	2131.42	2410.58	653.55	33.29	472.23	2131.42	2410.58	601.15
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	226.2	33.61	550.40	2151.87	2433.70	666.52	33.61	484.90	2151.87	2433.70	614.11
10.1	8.1	6	0.70	0.50	0.67	30.80	21.43	229.0	33.93	563.19	2172.31	2456.82	679.58	33.93	497.69	2172.31	2456.82	627.17
10.2	8.2	6	0.70	0.50	0.67	30.80	21.43	231.8	34.25	576.10	2192.75	2479.95	692.73	34.25	510.60	2192.75	2479.95	640.33
10.3	8.3	6	0.70	0.50	0.67	30.80	21.43	234.7	34.57	589.14	2213.20	2503.07	705.99	34.57	523.63	2213.20	2503.07	653.58
10.4	8.4	6	0.70	0.50	0.67	30.80	21.43	237.5	34.89	602.29	2233.64	2526.19	719.34	34.89	536.79	2233.64	2526.19	666.93
10.5	8.5	6	0.70	0.50	0.67	30.80	21.43	240.3	35.21	615.56	2254.08	2549.31	732.78	35.21	550.06	2254.08	2549.31	680.38
10.6	8.6	6	0.70	0.50	0.67	30.80	21.43	243.2	35.53	628.96	2274.53	2572.43	746.32	35.53	563.45	2274.53	2572.43	693.92
10.7	8.7	7	0.50	0.50	0.40	19.00	3.57	246.0	25.00	638.38	652.15	737.56	756.69	21.61	571.60	381.67	431.65	703.27
10.8	8.8	7	0.50	0.50	0.40	19.00	3.57	248.8	25.00	647.81	653.98	739.64	767.06	21.79	579.81	384.70	435.09	712.67
10.9	8.9	7	0.50	0.50	0.40	19.00	3.57	251.6	25.00	657.23	655.82	741.71	777.43	21.96	588.09	387.74	438.53	722.12
11.0	9.0	7	0.50	0.50	0.40	19.00	3.57	254.5	25.00	666.66	657.65	743.78	787.79	22.13	596.44	390.78	441.97	731.62
11.1	9.1	7	0.50	0.50	0.40	19.00	3.57	257.3	25.00	676.08	659.48	745.86	798.16	22.30	604.84	393.82	445.40	741.17
11.2	9.2	7	0.50	0.50	0.40	19.00	3.57	260.1	25.00	685.51	661.31	747.93	808.53	22.47	613.32	396.86	448.84	750.78
11.3	9.3	7	0.50	0.50	0.40	19.00	3.57	263.0	25.00	694.93	663.15	750.00	818.90	22.65	621.85	399.90	452.28	760.43
11.4	9.4	7	0.50	0.50	0.40	19.00	3.57	265.8	25.00	704.35	664.98	752.07	829.26	22.82	630.46	402.94	455.71	770.14
11.5	9.5	7	0.50	0.50	0.40	19.00	3.57	268.6	25.00	713.78	666.81	754.15	839.63	22.99	639.12	405.98	459.15	779.90
11.6	9.6	7	0.50	0.50	0.40	19.00	3.57	271.4	25.00	723.20	668.65	756.22	850.00	23.16	647.85	409.02	462.59	789.72
11.7	9.7	8	0.70	0.50	0.73	33.10	27.98	274.3	42.15	739.10	3235.45	3659.21	865.54	42.15	663.75	3235.45	3659.21	805.26
11.8	9.8	8	0.70	0.50	0.73	33.10	27.97	277.1	42.50	755.12	3260.82	3687.90	881.18	42.50	679.77	3260.82	3687.90	820.90
11.9	9.9	9	0.70	0.50	0.86	37.70	45.33	279.9	50.54	774.17	5327.12	6024.83	899.25	50.54	698.82	5327.12	6024.83	838.97
12.0	10.0	9	0.70	0.50	0.86	37.70	45.31	282.7	50.95	793.38	5368.36	6071.47	917.45	50.95	718.03	5368.36	6071.47	857.17
12.1	10.1	9	0.70	0.50	0.86	37.70	45.29	285.6	51.36	812.74	5409.55	6118.06	935.77	51.36	737.40	5409.55	6118.06	875.49
12.2	10.2	9	0.70	0.50	0.86	37.70	45.28	288.4	51.77	832.26	5450.70	6164.60	954.21	51.77	756.91	5450.70	6164.60	893.93
12.3	10.3	9	0.70	0.50	0.86	37.70	45.26	291.2	52.18	851.94	5491.81	6211.09	972.77	52.18	776.59	5491.81	6211.09	912.49
12.4	10.4	9	0.70	0.50	0.86	37.70	45.24	294.1	52.59	871.76	5532.87	6257.53	991.46	52.59	796.41	5532.87	6257.53	931.18
12.5	10.5	9	0.70	0.50	0.86	37.70	45.23	296.9	53.00	891.74	5573.89	6303.92	1010.28	53.00	816.40	5573.89	6303.92	950.00
12.6	10.6	9	0.70	0.50	0.86	37.70	45.21	299.7	53.41	911.88	5614.87	6350.27	1029.21	53.41	836.53	5614.87	6350.27	968.93
12.7	10.7	9	0.70	0.50	0.86	37.70	45.19	302.5	53.82	932.17	5655.80	6396.56	1048.27	53.82	856.82	5655.80	6396.56	987.99
12.8	10.8	9	0.70	0.50	0.86	37.70	45.17	305.4	54.23	952.62	5696.69	6442.80	1067.46	54.23	877.27	5696.69	6442.80	1007.18
12.9	10.9	9	0.70	0.50	0.86	37.70	45.16	308.2	54.65	973.22	5737.53	6488.99	1086.77	54.65	897.87	5737.53	6488.99	1026.49
13.0	11.0	9	0.70	0.50	0.86	37.70	45.14	311.0	55.06	993.98	5778.33	6535.14	1106.20	55.06	918.63	5778.33	6535.14	1045.92
13.1	11.1	9	0.70	0.50	0.86	37.70	45.12	313.8	55.47	1014.89	5819.08	6581.23	1125.75	55.47	939.54	5819.08	6581.23	1065.47
13.2	11.2	9	0.70	0.50	0.86	37.70	45.10	316.7	55.88	1035.95	5859.79	6627.26	1145.43	55.88	960.60	5859.79	6627.26	1085.15
13.3	11.3	9	0.70	0.50	0.86	37.70	45.08	319.5	56.29	1057.17	5900.45	6673.25	1165.24	56.29	981.82	5900.45	6673.25	1104.96
13.4	11.4	9	0.70	0.50	0.86	37.70	45.07	322.3	56.70	1078.54	5941.06	6719.19	1185.16	56.70	1003.19	5941.06	6719.19	1124.88
13.5	11.5	10	0.70	0.50	0.73	33.10	27.77	325.2	48.41	1096.80	3687.68	4170.67	1202.59	48.41	1021.45	3687.68	4170.67	1142.31
13.6	11.6	10	0.70	0.50	0.73	33.10	27.76	328.0	48.76	1115.18	3712.52	4198.76	1220.13	48.76	1039.83	3712.52	4198.76	1159.85

13.7	11.7	10	0.70	0.50	0.73	33.10	27.75	330.8	49.11	1133.69	3737.33	4226.82	1237.76	49.11	1058.34	3737.33	4226.82	1177.48
13.8	11.8	10	0.70	0.50	0.73	33.10	27.73	333.6	49.46	1152.34	3762.11	4254.85	1255.51	49.46	1076.99	3762.11	4254.85	1195.23
13.9	11.9	10	0.70	0.50	0.73	33.10	27.72	336.5	49.81	1171.11	3786.86	4282.84	1273.36	49.81	1095.77	3786.86	4282.84	1213.08
14.0	12.0	10	0.70	0.50	0.73	33.10	27.71	339.3	50.15	1190.02	3811.58	4310.79	1291.31	50.15	1114.67	3811.58	4310.79	1231.03
14.1	12.1	10	0.70	0.50	0.73	33.10	27.70	342.1	50.50	1209.06	3836.26	4338.71	1309.37	50.50	1133.71	3836.26	4338.71	1249.09
14.2	12.2	10	0.70	0.50	0.73	33.10	27.68	344.9	50.85	1228.23	3860.92	4366.60	1327.53	50.85	1152.88	3860.92	4366.60	1267.25
14.3	12.3	10	0.70	0.50	0.73	33.10	27.67	347.8	51.20	1247.53	3885.54	4394.44	1345.80	51.20	1172.18	3885.54	4394.44	1285.52
14.4	12.4	10	0.70	0.50	0.73	33.10	27.66	350.6	51.55	1266.96	3910.13	4422.25	1364.17	51.55	1191.61	3910.13	4422.25	1303.89
14.5	12.5	10	0.70	0.50	0.73	33.10	27.65	353.4	51.89	1286.53	3934.69	4450.03	1382.65	51.89	1211.18	3934.69	4450.03	1322.37
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	1309.76	6424.74	7266.21	1404.06	61.62	1234.41	6424.74	7266.21	1343.78
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	1333.14	6464.73	7311.44	1425.60	62.03	1257.79	6464.73	7311.44	1365.32
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	1356.68	6504.67	7356.61	1447.26	62.44	1281.33	6504.67	7356.61	1386.98
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	1380.38	6544.56	7401.73	1469.04	62.85	1305.03	6544.56	7401.73	1408.76
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1404.22	6584.40	7446.78	1490.95	63.26	1328.88	6584.40	7446.78	1430.67
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1428.23	6624.19	7491.78	1512.98	63.67	1352.88	6624.19	7491.78	1452.70
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1452.39	6663.93	7536.72	1535.13	64.08	1377.04	6663.93	7536.72	1474.85
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1476.70	6703.61	7581.61	1557.41	64.49	1401.35	6703.61	7581.61	1497.13
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1501.17	6743.25	7626.43	1579.81	64.90	1425.82	6743.25	7626.43	1519.53
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1525.79	6782.83	7671.20	1602.34	65.31	1450.44	6782.83	7671.20	1542.06
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1550.57	6822.36	7715.90	1624.98	65.72	1475.22	6822.36	7715.90	1564.70
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1575.50	6861.83	7760.55	1647.76	66.13	1500.15	6861.83	7760.55	1587.48
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1600.58	6901.26	7805.14	1670.65	66.54	1525.24	6901.26	7805.14	1610.37
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1625.83	6940.63	7849.66	1693.67	66.95	1550.48	6940.63	7849.66	1633.39
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1651.22	6979.94	7894.13	1716.82	67.36	1575.87	6979.94	7894.13	1656.54
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1676.77	7019.21	7938.54	1740.09	67.77	1601.42	7019.21	7938.54	1679.81
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1702.48	7058.42	7982.88	1763.48	68.18	1627.13	7058.42	7982.88	1703.20
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.15	1724.40	4371.03	4943.52	1783.84	58.15	1649.05	4371.03	4943.52	1723.56
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.50	1746.45	4394.94	4970.56	1804.31	58.50	1671.11	4394.94	4970.56	1744.03
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	58.85	1768.64	4418.82	4997.57	1824.89	58.85	1693.29	4418.82	4997.57	1764.61
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.20	1790.96	4442.66	5024.53	1845.57	59.20	1715.61	4442.66	5024.53	1785.29
16.7	14.7	12	0.70	0.50	0.73	33.10	27.35	415.6	59.55	1813.41	4466.47	5051.46	1866.36	59.55	1738.06	4466.47	5051.46	1806.08
16.8	14.8	12	0.70	0.50	0.73	33.10	27.33	418.5	59.89	1835.98	4490.24	5078.34	1887.25	59.89	1760.64	4490.24	5078.34	1826.97
16.9	14.9	12	0.70	0.50	0.73	33.10	27.32	421.3	60.24	1858.69	4513.97	5105.18	1908.24	60.24	1783.35	4513.97	5105.18	1847.96
17.0	15.0	12	0.70	0.50	0.73	33.10	27.31	424.1	60.59	1881.54	4537.67	5131.98	1929.34	60.59	1806.19	4537.67	5131.98	1869.06

1.2.1.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1549	1499

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	2.0	10.07	3.16	655.09	514.51	4.49	10.07	3.16	655.09	514.51	4.49
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	3.9	10.39	6.43	676.03	530.96	9.07	10.39	6.43	676.03	530.96	9.07
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	5.9	10.71	9.79	696.97	547.40	13.72	10.71	9.79	696.97	547.40	13.72
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	7.9	11.03	13.25	717.91	563.85	18.46	11.03	13.25	717.91	563.85	18.46
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	9.8	11.27	16.79	721.32	566.52	23.25	11.27	16.79	721.32	566.52	23.25
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	11.8	11.59	20.43	741.76	582.58	28.13	11.59	20.43	741.76	582.58	28.13
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	13.7	11.91	24.17	762.20	598.63	33.08	11.91	24.17	762.20	598.63	33.08
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	15.7	12.22	28.01	782.65	614.69	38.12	12.22	28.01	782.65	614.69	38.12
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	17.7	12.54	31.96	803.09	630.75	43.24	12.54	31.96	803.09	630.75	43.24
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	19.6	12.86	36.00	823.54	646.80	48.43	12.86	36.00	823.54	646.80	48.43
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	21.6	13.18	40.14	843.98	662.86	53.71	13.18	40.14	843.98	662.86	53.71
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	23.6	13.50	44.38	864.42	678.92	59.07	13.50	44.38	864.42	678.92	59.07
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	25.5	13.82	48.72	884.87	694.97	64.50	13.82	48.72	884.87	694.97	64.50
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	27.5	14.14	53.16	905.31	711.03	70.02	14.14	53.16	905.31	711.03	70.02
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	29.5	14.46	57.71	925.75	727.09	75.62	14.46	57.71	925.75	727.09	75.62
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	31.4	14.78	62.35	946.20	743.14	81.30	14.78	62.35	946.20	743.14	81.30
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	33.4	15.10	67.09	966.64	759.20	87.05	15.10	67.09	966.64	759.20	87.05
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	35.3	15.42	71.94	987.09	775.26	92.89	15.42	71.94	987.09	775.26	92.89
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	37.3	15.74	76.88	1007.53	791.31	98.81	15.74	76.88	1007.53	791.31	98.81
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	39.3	16.06	81.93	1027.97	807.37	104.81	16.06	81.93	1027.97	807.37	104.81
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	41.2	16.38	87.07	1048.42	823.43	110.89	16.38	87.07	1048.42	823.43	110.89
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	43.2	16.70	92.31	1068.86	839.48	117.05	16.70	92.31	1068.86	839.48	117.05

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	45.2	17.01	97.66	1089.30	855.54	123.29	17.01	97.66	1089.30	855.54	123.29
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	47.1	17.33	103.11	1109.75	871.59	129.61	17.33	103.11	1109.75	871.59	129.61
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	49.1	17.50	108.60	311.97	245.02	135.97	10.63	106.45	187.77	147.48	134.24
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	51.1	17.50	114.10	313.81	246.46	142.33	10.81	109.84	190.81	149.86	138.92
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	53.0	17.50	119.60	315.64	247.90	148.69	10.98	113.29	193.85	152.25	143.65
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	55.0	17.50	125.10	317.47	249.34	155.06	11.15	116.79	196.89	154.64	148.41
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	56.9	17.50	130.59	319.31	250.78	161.42	11.32	120.35	199.93	157.02	153.22
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	58.9	17.50	136.09	321.14	252.22	167.78	11.49	123.96	202.97	159.41	158.07
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	60.9	17.50	141.59	322.97	253.66	174.14	11.67	127.63	206.01	161.80	162.97
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	62.8	17.50	147.09	324.80	255.10	180.50	11.84	131.34	209.05	164.19	167.91
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	64.8	20.81	153.63	1462.27	1148.46	187.70	20.81	137.88	1462.27	1148.46	175.10
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	66.8	21.15	160.27	1485.69	1166.86	194.97	21.15	144.53	1485.69	1166.86	182.38
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	68.7	21.48	167.02	1509.11	1185.26	202.34	21.48	151.27	1509.11	1185.26	189.74
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	70.7	21.81	173.87	1532.54	1203.65	209.78	21.81	158.13	1532.54	1203.65	197.19
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	72.6	22.15	180.83	1555.96	1222.05	217.31	22.15	165.08	1555.96	1222.05	204.72
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	74.6	22.48	187.89	1579.38	1240.45	224.92	22.48	172.15	1579.38	1240.45	212.33
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	76.6	22.81	195.06	1602.81	1258.84	232.62	22.81	179.31	1602.81	1258.84	220.03
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	201.28	385.18	302.52	239.56	13.36	183.51	235.91	185.28	225.35
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	207.50	387.02	303.96	246.50	13.53	187.76	238.95	187.67	230.71
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	213.72	388.85	305.40	253.44	13.70	192.07	241.99	190.06	236.12
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	219.94	390.68	306.84	260.38	13.88	196.42	245.03	192.44	241.57
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	226.16	392.51	308.28	267.32	14.05	200.84	248.07	194.83	247.06
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	232.38	394.35	309.72	274.26	14.22	205.31	251.10	197.22	252.60
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	238.60	396.18	311.16	281.20	14.39	209.83	254.14	199.60	258.18
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	244.82	398.01	312.60	288.14	14.56	214.40	257.18	201.99	263.81
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	251.04	399.85	314.04	295.08	14.74	219.03	260.22	204.38	269.47
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	257.26	401.68	315.48	302.02	14.91	223.72	263.26	206.77	275.18
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	263.48	403.51	316.92	308.96	15.08	228.45	266.30	209.15	280.94
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	269.70	405.35	318.36	315.90	15.25	233.25	269.34	211.54	286.73
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	275.92	407.18	319.80	322.84	15.42	238.09	272.38	213.93	292.57
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	282.14	409.01	321.24	329.78	15.60	242.99	275.42	216.31	298.46
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	288.36	410.84	322.68	336.72	15.77	247.95	278.46	218.70	304.38
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	294.58	412.68	324.12	343.66	15.94	252.95	281.50	221.09	310.35
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	300.80	414.51	325.56	350.60	16.11	258.02	284.54	223.47	316.37
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	307.02	416.34	327.00	357.54	16.29	263.13	287.58	225.86	322.42
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	313.24	418.18	328.43	364.48	16.46	268.30	290.62	228.25	328.52
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	319.46	420.01	329.87	371.42	16.63	273.53	293.65	230.64	334.67
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	325.68	421.84	331.31	378.36	16.80	278.80	296.69	233.02	340.85
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	331.90	423.68	332.75	385.30	16.97	284.14	299.73	235.41	347.08
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	338.12	425.51	334.19	392.24	17.15	289.52	302.77	237.80	353.36
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	344.34	427.34	335.63	399.18	17.32	294.96	305.81	240.18	359.67
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	350.56	429.17	337.07	406.12	17.49	300.46	308.85	242.57	366.03
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	356.78	431.01	338.51	413.06	17.66	306.01	311.89	244.96	372.43
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	363.01	432.84	339.95	419.99	17.83	311.61	314.93	247.35	378.88
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	369.23	434.67	341.39	426.93	18.01	317.27	317.97	249.73	385.37
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	375.45	436.51	342.83	433.87	18.18	322.98	321.01	252.12	391.90
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	381.67	438.34	344.27	440.81	18.35	328.74	324.05	254.51	398.48

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	387.89	440.17	345.71	447.75	18.52	334.56	327.09	256.89	405.10
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	394.11	442.01	347.15	454.69	18.70	340.44	330.13	259.28	411.76
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	400.33	443.84	348.59	461.63	18.87	346.36	333.17	261.67	418.46
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	406.55	445.67	350.03	468.57	19.04	352.35	336.20	264.05	425.21
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	412.77	447.50	351.47	475.51	19.21	358.38	339.24	266.44	432.00
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	418.99	449.34	352.91	482.45	19.38	364.47	342.28	268.83	438.84
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	425.21	451.17	354.35	489.39	19.56	370.61	345.32	271.22	445.72
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	431.43	453.00	355.79	496.33	19.73	376.81	348.36	273.60	452.64
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	153.2	19.80	437.65	454.84	357.23	503.27	19.90	383.06	351.40	275.99	459.60
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	155.1	33.29	448.11	2131.42	1674.01	513.60	33.29	393.52	2131.42	1674.01	469.93
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	157.1	33.61	458.67	2151.87	1690.07	524.01	33.61	404.08	2151.87	1690.07	480.34
10.1	8.1	6	0.70	0.50	0.67	30.80	21.42	159.0	33.93	469.33	2171.20	1705.25	534.51	33.93	414.74	2171.20	1705.25	490.84
10.2	8.2	6	0.70	0.50	0.67	30.80	21.41	161.0	34.25	480.09	2190.50	1720.42	545.08	34.25	425.50	2190.50	1720.42	501.41
10.3	8.3	6	0.70	0.50	0.67	30.80	21.40	163.0	34.57	490.95	2209.78	1735.56	555.73	34.57	436.36	2209.78	1735.56	512.06
10.4	8.4	6	0.70	0.50	0.67	30.80	21.39	164.9	34.89	501.91	2229.03	1750.68	566.46	34.89	447.32	2229.03	1750.68	522.79
10.5	8.5	6	0.70	0.50	0.67	30.80	21.37	166.9	35.21	512.97	2248.26	1765.78	577.27	35.21	458.38	2248.26	1765.78	533.60
10.6	8.6	6	0.70	0.50	0.67	30.80	21.36	168.9	35.53	524.13	2267.45	1780.85	588.16	35.53	469.54	2267.45	1780.85	544.50
10.7	8.7	7	0.50	0.50	0.40	19.00	3.55	170.8	25.00	531.98	652.15	512.20	596.41	21.61	476.33	379.83	298.32	551.89
10.8	8.8	7	0.50	0.50	0.40	19.00	3.55	172.8	25.00	539.84	653.98	513.64	604.66	21.79	483.18	382.58	300.48	559.33
10.9	8.9	7	0.50	0.50	0.40	19.00	3.55	174.8	25.00	547.69	655.82	515.08	612.90	21.96	490.08	385.34	302.64	566.81
11.0	9.0	7	0.50	0.50	0.40	19.00	3.54	176.7	25.00	555.55	657.65	516.52	621.15	22.13	497.03	388.08	304.80	574.34
11.1	9.1	7	0.50	0.50	0.40	19.00	3.54	178.7	25.00	563.40	659.48	517.96	629.40	22.30	504.04	390.82	306.95	581.91
11.2	9.2	7	0.50	0.50	0.40	19.00	3.54	180.6	25.00	571.25	661.31	519.39	637.64	22.47	511.10	393.56	309.10	589.52
11.3	9.3	7	0.50	0.50	0.40	19.00	3.54	182.6	25.00	579.11	663.15	520.83	645.89	22.65	518.21	396.29	311.24	597.17
11.4	9.4	7	0.50	0.50	0.40	19.00	3.53	184.6	25.00	586.96	664.98	522.27	654.14	22.82	525.38	399.01	313.38	604.87
11.5	9.5	7	0.50	0.50	0.40	19.00	3.53	186.5	25.00	594.82	666.81	523.71	662.38	22.99	532.60	401.73	315.52	612.61
11.6	9.6	7	0.50	0.50	0.40	19.00	3.53	188.5	25.00	602.67	668.65	525.15	670.63	23.16	539.88	404.45	317.65	620.40
11.7	9.7	8	0.70	0.50	0.73	33.10	27.75	190.5	42.15	615.91	3208.79	2520.17	683.19	42.15	553.12	3208.79	2520.17	632.96
11.8	9.8	8	0.70	0.50	0.73	33.10	27.74	192.4	42.50	629.27	3233.52	2539.60	695.83	42.50	566.47	3233.52	2539.60	645.60
11.9	9.9	9	0.70	0.50	0.86	37.70	44.98	194.4	50.54	645.14	5285.79	4151.45	710.50	50.54	582.35	5285.79	4151.45	660.27
12.0	10.0	9	0.70	0.50	0.86	37.70	44.95	196.3	50.95	661.15	5326.04	4183.06	725.27	50.95	598.36	5326.04	4183.06	675.04
12.1	10.1	9	0.70	0.50	0.86	37.70	44.93	198.3	51.36	677.29	5366.23	4214.63	740.14	51.36	614.50	5366.23	4214.63	689.91
12.2	10.2	9	0.70	0.50	0.86	37.70	44.91	200.3	51.77	693.55	5406.36	4246.15	755.12	51.77	630.76	5406.36	4246.15	704.89
12.3	10.3	9	0.70	0.50	0.86	37.70	44.89	202.2	52.18	709.95	5446.44	4277.62	770.20	52.18	647.16	5446.44	4277.62	719.96
12.4	10.4	9	0.70	0.50	0.86	37.70	44.86	204.2	52.59	726.47	5486.45	4309.05	785.38	52.59	663.68	5486.45	4309.05	735.15
12.5	10.5	9	0.70	0.50	0.86	37.70	44.84	206.2	53.00	743.12	5526.41	4340.43	800.66	53.00	680.33	5526.41	4340.43	750.43
12.6	10.6	9	0.70	0.50	0.86	37.70	44.82	208.1	53.41	759.90	5566.31	4371.77	816.05	53.41	697.11	5566.31	4371.77	765.82
12.7	10.7	9	0.70	0.50	0.86	37.70	44.79	210.1	53.82	776.81	5606.14	4403.05	831.54	53.82	714.02	5606.14	4403.05	781.31
12.8	10.8	9	0.70	0.50	0.86	37.70	44.77	212.1	54.23	793.85	5645.91	4434.29	847.14	54.23	731.06	5645.91	4434.29	796.90
12.9	10.9	9	0.70	0.50	0.86	37.70	44.75	214.0	54.65	811.02	5685.63	4465.48	862.83	54.65	748.23	5685.63	4465.48	812.60
13.0	11.0	9	0.70	0.50	0.86	37.70	44.72	216.0	55.06	828.31	5725.28	4496.62	878.63	55.06	765.52	5725.28	4496.62	828.40
13.1	11.1	9	0.70	0.50	0.86	37.70	44.70	217.9	55.47	845.74	5764.87	4527.72	894.54	55.47	782.95	5764.87	4527.72	844.31
13.2	11.2	9	0.70	0.50	0.86	37.70	44.68	219.9	55.88	863.29	5804.39	4558.76	910.55	55.88	800.50	5804.39	4558.76	860.31
13.3	11.3	9	0.70	0.50	0.86	37.70	44.65	221.9	56.29	880.97	5843.85	4589.75	926.65	56.29	818.18	5843.85	4589.75	876.42
13.4	11.4	9	0.70	0.50	0.86	37.70	44.63	223.8	56.70	898.79	5883.25	4620.70	942.87	56.70	836.00	5883.25	4620.70	892.63
13.5	11.5	10	0.70	0.50	0.73	33.10	27.47	225.8	48.41	914.00	3648.11	2865.22	957.00	48.41	851.21	3648.11	2865.22	906.77
13.6	11.6	10	0.70	0.50	0.73	33.10	27.46	227.8	48.76	929.32	3672.13	2884.08	971.22	48.76	866.52	3672.13	2884.08	920.99

13.7	11.7	10	0.70	0.50	0.73	33.10	27.44	229.7	49.11	944.74	3696.11	2902.92	985.52	49.11	881.95	3696.11	2902.92	935.29
13.8	11.8	10	0.70	0.50	0.73	33.10	27.42	231.7	49.46	960.28	3720.05	2921.72	999.92	49.46	897.49	3720.05	2921.72	949.69
13.9	11.9	10	0.70	0.50	0.73	33.10	27.41	233.7	49.81	975.93	3743.95	2940.49	1014.40	49.81	913.14	3743.95	2940.49	964.17
14.0	12.0	10	0.70	0.50	0.73	33.10	27.39	235.6	50.15	991.69	3767.80	2959.22	1028.97	50.15	928.89	3767.80	2959.22	978.73
14.1	12.1	10	0.70	0.50	0.73	33.10	27.37	237.6	50.50	1007.55	3791.61	2977.92	1043.62	50.50	944.76	3791.61	2977.92	993.39
14.2	12.2	10	0.70	0.50	0.73	33.10	27.36	239.5	50.85	1023.53	3815.37	2996.59	1058.37	50.85	960.73	3815.37	2996.59	1008.13
14.3	12.3	10	0.70	0.50	0.73	33.10	27.34	241.5	51.20	1039.61	3839.10	3015.22	1073.20	51.20	976.82	3839.10	3015.22	1022.96
14.4	12.4	10	0.70	0.50	0.73	33.10	27.32	243.5	51.55	1055.80	3862.78	3033.82	1088.12	51.55	993.01	3862.78	3033.82	1037.88
14.5	12.5	10	0.70	0.50	0.73	33.10	27.31	245.4	51.89	1072.11	3886.41	3052.38	1103.12	51.89	1009.31	3886.41	3052.38	1052.89
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	1091.46	6350.93	4988.01	1120.57	61.62	1028.67	6350.93	4988.01	1070.34
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	1110.95	6389.47	5018.28	1138.13	62.03	1048.16	6389.47	5018.28	1087.89
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	1130.57	6427.93	5048.49	1155.78	62.44	1067.78	6427.93	5048.49	1105.55
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	1150.31	6466.33	5078.64	1173.54	62.85	1087.52	6466.33	5078.64	1123.31
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	1170.19	6504.65	5108.74	1191.40	63.26	1107.40	6504.65	5108.74	1141.17
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	1190.19	6542.91	5138.79	1209.37	63.67	1127.40	6542.91	5138.79	1159.14
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	1210.32	6581.09	5168.78	1227.44	64.08	1147.53	6581.09	5168.78	1177.21
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	1230.58	6619.20	5198.71	1245.61	64.49	1167.79	6619.20	5198.71	1195.38
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	1250.97	6657.24	5228.58	1263.89	64.90	1188.18	6657.24	5228.58	1213.65
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	1271.49	6695.20	5258.40	1282.26	65.31	1208.70	6695.20	5258.40	1232.03
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	1292.14	6733.10	5288.16	1300.75	65.72	1229.35	6733.10	5288.16	1250.51
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	1312.92	6770.92	5317.87	1319.33	66.13	1250.12	6770.92	5317.87	1269.10
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1333.82	6808.66	5347.51	1338.02	66.54	1271.03	6808.66	5347.51	1287.79
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1354.85	6846.33	5377.10	1356.81	66.95	1292.06	6846.33	5377.10	1306.58
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1376.02	6883.93	5406.63	1375.70	67.36	1313.23	6883.93	5406.63	1325.47
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1397.31	6921.45	5436.10	1394.70	67.77	1334.52	6921.45	5436.10	1344.47
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1418.73	6958.90	5465.51	1413.80	68.18	1355.94	6958.90	5465.51	1363.57
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.15	1437.00	4303.98	3380.34	1430.38	58.15	1374.21	4303.98	3380.34	1380.15
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.50	1455.38	4326.73	3398.21	1447.05	58.50	1392.59	4326.73	3398.21	1396.81
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	58.85	1473.87	4349.43	3416.03	1463.80	58.85	1411.08	4349.43	3416.03	1413.57
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.20	1492.46	4372.07	3433.82	1480.64	59.20	1429.67	4372.07	3433.82	1430.41
16.7	14.7	12	0.70	0.50	0.73	33.10	26.91	288.6	59.55	1511.17	4394.67	3451.56	1497.57	59.55	1448.38	4394.67	3451.56	1447.34
16.8	14.8	12	0.70	0.50	0.73	33.10	26.89	290.6	59.89	1529.99	4417.21	3469.27	1514.59	59.89	1467.20	4417.21	3469.27	1464.35
16.9	14.9	12	0.70	0.50	0.73	33.10	26.87	292.6	60.24	1548.91	4439.71	3486.94	1531.69	60.24	1486.12	4439.71	3486.94	1481.46
17.0	15.0	12	0.70	0.50	0.73	33.10	26.85	294.5	60.59	1567.95	4462.15	3504.57	1548.88	60.59	1505.16	4462.15	3504.57	1498.65

1.2.1.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1192	1152

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.67	31.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.67	31.00	21.95	1.3	10.07	2.53	655.09	329.29	3.28	10.07	2.53	655.09	329.29	3.28
2.2	0.2	1	0.70	0.50	0.67	31.00	21.95	2.5	10.39	5.14	676.03	339.81	6.63	10.39	5.14	676.03	339.81	6.63
2.3	0.3	1	0.70	0.50	0.67	31.00	21.95	3.8	10.71	7.83	696.97	350.34	10.04	10.71	7.83	696.97	350.34	10.04
2.4	0.4	1	0.70	0.50	0.67	31.00	21.95	5.0	11.03	10.60	717.91	360.86	13.51	11.03	10.60	717.91	360.86	13.51
2.5	0.5	2	0.70	0.50	0.67	30.80	21.43	6.3	11.27	13.44	721.32	362.57	17.03	11.27	13.44	721.32	362.57	17.03
2.6	0.6	2	0.70	0.50	0.67	30.80	21.43	7.5	11.59	16.35	741.76	372.85	20.62	11.59	16.35	741.76	372.85	20.62
2.7	0.7	2	0.70	0.50	0.67	30.80	21.43	8.8	11.91	19.34	762.20	383.13	24.27	11.91	19.34	762.20	383.13	24.27
2.8	0.8	2	0.70	0.50	0.67	30.80	21.43	10.1	12.22	22.41	782.65	393.40	27.98	12.22	22.41	782.65	393.40	27.98
2.9	0.9	2	0.70	0.50	0.67	30.80	21.43	11.3	12.54	25.56	803.09	403.68	31.76	12.54	25.56	803.09	403.68	31.76
3.0	1.0	2	0.70	0.50	0.67	30.80	21.43	12.6	12.86	28.80	823.54	413.95	35.60	12.86	28.80	823.54	413.95	35.60
3.1	1.1	2	0.70	0.50	0.67	30.80	21.43	13.8	13.18	32.11	843.98	424.23	39.51	13.18	32.11	843.98	424.23	39.51
3.2	1.2	2	0.70	0.50	0.67	30.80	21.43	15.1	13.50	35.50	864.42	434.51	43.48	13.50	35.50	864.42	434.51	43.48
3.3	1.3	2	0.70	0.50	0.67	30.80	21.43	16.3	13.82	38.98	884.87	444.78	47.52	13.82	38.98	884.87	444.78	47.52
3.4	1.4	2	0.70	0.50	0.67	30.80	21.43	17.6	14.14	42.53	905.31	455.06	51.62	14.14	42.53	905.31	455.06	51.62
3.5	1.5	2	0.70	0.50	0.67	30.80	21.43	18.8	14.46	46.17	925.75	465.34	55.78	14.46	46.17	925.75	465.34	55.78
3.6	1.6	2	0.70	0.50	0.67	30.80	21.43	20.1	14.78	49.88	946.20	475.61	60.01	14.78	49.88	946.20	475.61	60.01
3.7	1.7	2	0.70	0.50	0.67	30.80	21.43	21.4	15.10	53.67	966.64	485.89	64.30	15.10	53.67	966.64	485.89	64.30
3.8	1.8	2	0.70	0.50	0.67	30.80	21.43	22.6	15.42	57.55	987.09	496.16	68.66	15.42	57.55	987.09	496.16	68.66
3.9	1.9	2	0.70	0.50	0.67	30.80	21.43	23.9	15.74	61.50	1007.53	506.44	73.08	15.74	61.50	1007.53	506.44	73.08
4.0	2.0	2	0.70	0.50	0.67	30.80	21.43	25.1	16.06	65.54	1027.97	516.72	77.56	16.06	65.54	1027.97	516.72	77.56
4.1	2.1	2	0.70	0.50	0.67	30.80	21.43	26.4	16.38	69.66	1048.42	526.99	82.11	16.38	69.66	1048.42	526.99	82.11
4.2	2.2	2	0.70	0.50	0.67	30.80	21.43	27.6	16.70	73.85	1068.86	537.27	86.73	16.70	73.85	1068.86	537.27	86.73

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.67	30.80	21.43	28.9	17.01	78.13	1089.30	547.54	91.41	17.01	78.13	1089.30	547.54	91.41
4.4	2.4	2	0.70	0.50	0.67	30.80	21.43	30.2	17.33	82.48	1109.75	557.82	96.15	17.33	82.48	1109.75	557.82	96.15
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	31.4	17.50	86.88	311.97	156.81	100.92	10.63	85.16	187.77	94.38	99.54
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	32.7	17.50	91.28	313.81	157.74	105.70	10.81	87.87	190.81	95.91	102.97
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	33.9	17.50	95.68	315.64	158.66	110.47	10.98	90.63	193.85	97.44	106.43
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	35.2	17.50	100.08	317.47	159.58	115.25	11.15	93.43	196.89	98.97	109.93
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	36.4	17.50	104.48	319.31	160.50	120.02	11.32	96.28	199.93	100.50	113.47
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	37.7	17.50	108.87	321.14	161.42	124.80	11.49	99.17	202.97	102.02	117.03
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	39.0	17.50	113.27	322.97	162.34	129.57	11.67	102.10	206.01	103.55	120.64
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	40.2	17.50	117.67	324.80	163.26	134.35	11.84	105.08	209.05	105.08	124.27
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	41.5	20.81	122.90	1462.27	735.02	139.79	20.81	110.31	1462.27	735.02	129.71
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	42.7	21.15	128.22	1485.69	746.79	145.30	21.15	115.62	1485.69	746.79	135.22
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	44.0	21.48	133.61	1509.11	758.56	150.87	21.48	121.02	1509.11	758.56	140.80
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	45.2	21.81	139.10	1532.54	770.34	156.52	21.81	126.50	1532.54	770.34	146.44
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	46.5	22.15	144.66	1555.96	782.11	162.22	22.15	132.07	1555.96	782.11	152.15
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	47.8	22.48	150.31	1579.38	793.89	168.00	22.48	137.72	1579.38	793.89	157.93
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	49.0	22.81	156.04	1602.81	805.66	173.84	22.81	143.45	1602.81	805.66	163.77
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	161.02	385.18	193.61	179.08	13.36	146.81	235.91	118.58	167.71
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	166.00	387.02	194.53	184.32	13.53	150.21	238.95	120.11	171.69
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	170.97	388.85	195.46	189.56	13.70	153.65	241.99	121.64	175.70
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	175.95	390.68	196.38	194.80	13.88	157.14	245.03	123.16	179.75
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	180.93	392.51	197.30	200.03	14.05	160.67	248.07	124.69	183.83
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	185.90	394.35	198.22	205.27	14.22	164.24	251.10	126.22	187.94
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	190.88	396.18	199.14	210.51	14.39	167.86	254.14	127.75	192.09
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	195.85	398.01	200.06	215.75	14.56	171.52	257.18	129.27	196.28
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	200.83	399.85	200.98	220.98	14.74	175.23	260.22	130.80	200.50
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	205.81	401.68	201.91	226.22	14.91	178.97	263.26	132.33	204.75
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	210.78	403.51	202.83	231.46	15.08	182.76	266.30	133.86	209.04
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	215.76	405.35	203.75	236.70	15.25	186.60	269.34	135.39	213.37
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	220.74	407.18	204.67	241.93	15.42	190.47	272.38	136.91	217.72
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	225.71	409.01	205.59	247.17	15.60	194.39	275.42	138.44	222.12
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	230.69	410.84	206.51	252.41	15.77	198.36	278.46	139.97	226.54
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	235.67	412.68	207.43	257.65	15.94	202.36	281.50	141.50	231.01
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	240.64	414.51	208.36	262.88	16.11	206.41	284.54	143.02	235.50
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	245.62	416.34	209.28	268.12	16.29	210.51	287.58	144.55	240.03
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	250.59	418.18	210.20	273.36	16.46	214.64	290.62	146.08	244.60
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	255.57	420.01	211.12	278.60	16.63	218.82	293.65	147.61	249.20
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	260.55	421.84	212.04	283.84	16.80	223.04	296.69	149.13	253.83
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	265.52	423.68	212.96	289.07	16.97	227.31	299.73	150.66	258.50
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	270.50	425.51	213.88	294.31	17.15	231.62	302.77	152.19	263.21
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	275.48	427.34	214.81	299.55	17.32	235.97	305.81	153.72	267.95
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	280.45	429.17	215.73	304.79	17.49	240.37	308.85	155.25	272.72
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	285.43	431.01	216.65	310.02	17.66	244.81	311.62	156.64	277.53
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	290.40	432.84	217.57	315.26	17.83	249.29	314.39	158.03	282.37
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	295.38	434.67	218.49	320.50	18.01	253.81	317.15	159.42	287.25
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	300.36	436.51	219.41	325.74	18.18	258.38	319.91	160.80	292.16
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	305.33	438.34	220.33	330.97	18.35	263.00	322.66	162.18	297.10

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	310.31	440.17	221.25	336.21	18.52	267.65	325.40	163.56	302.09
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	315.29	442.01	222.18	341.45	18.70	272.35	328.13	164.94	307.10
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	320.26	443.84	223.10	346.69	18.87	277.09	330.86	166.31	312.15
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	325.24	445.67	224.02	351.93	19.04	281.88	333.58	167.68	317.24
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	330.21	447.50	224.94	357.16	19.21	286.70	336.30	169.04	322.35
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	335.19	449.34	225.86	362.40	19.38	291.58	339.01	170.40	327.51
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	340.17	451.17	226.78	367.64	19.56	296.49	341.71	171.76	332.70
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	345.14	453.00	227.70	372.88	19.73	301.45	344.40	173.12	337.92
9.8	7.8	5	0.66	0.50	0.40	19.00	3.52	98.0	19.80	350.12	454.84	228.63	378.11	19.90	306.45	347.09	174.47	343.18
9.9	7.9	6	0.70	0.50	0.67	30.80	21.21	99.3	33.29	358.49	2110.01	1060.61	386.06	33.29	314.82	2110.01	1060.61	351.13
10.0	8.0	6	0.70	0.50	0.67	30.80	21.20	100.5	33.61	366.93	2128.74	1070.02	394.08	33.61	323.27	2128.74	1070.02	359.14
10.1	8.1	6	0.70	0.50	0.67	30.80	21.18	101.8	33.93	375.46	2147.42	1079.41	402.16	33.93	331.79	2147.42	1079.41	367.22
10.2	8.2	6	0.70	0.50	0.67	30.80	21.17	103.0	34.25	384.07	2166.07	1088.79	410.30	34.25	340.40	2166.07	1088.79	375.36
10.3	8.3	6	0.70	0.50	0.67	30.80	21.15	104.3	34.57	392.76	2184.68	1098.14	418.51	34.57	349.09	2184.68	1098.14	383.57
10.4	8.4	6	0.70	0.50	0.67	30.80	21.14	105.6	34.89	401.53	2203.25	1107.47	426.78	34.89	357.86	2203.25	1107.47	391.84
10.5	8.5	6	0.70	0.50	0.67	30.80	21.12	106.8	35.21	410.38	2221.78	1116.79	435.11	35.21	366.71	2221.78	1116.79	400.18
10.6	8.6	6	0.70	0.50	0.67	30.80	21.11	108.1	35.53	419.30	2240.27	1126.08	443.51	35.53	375.64	2240.27	1126.08	408.58
10.7	8.7	7	0.50	0.50	0.40	19.00	3.49	109.3	25.00	425.59	652.15	327.81	449.80	21.61	381.07	373.82	187.90	414.18
10.8	8.8	7	0.50	0.50	0.40	19.00	3.49	110.6	25.00	431.87	653.98	328.73	456.08	21.79	386.54	376.44	189.22	419.82
10.9	8.9	7	0.50	0.50	0.40	19.00	3.49	111.8	25.00	438.15	655.82	329.65	462.36	21.96	392.06	379.04	190.53	425.49
11.0	9.0	7	0.50	0.50	0.40	19.00	3.48	113.1	25.00	444.44	657.65	330.57	468.65	22.13	397.62	381.64	191.84	431.20
11.1	9.1	7	0.50	0.50	0.40	19.00	3.48	114.4	25.00	450.72	659.48	331.49	474.93	22.30	403.23	384.24	193.14	436.94
11.2	9.2	7	0.50	0.50	0.40	19.00	3.48	115.6	25.00	457.00	661.31	332.41	481.21	22.47	408.88	386.82	194.44	442.71
11.3	9.3	7	0.50	0.50	0.40	19.00	3.47	116.9	25.00	463.29	663.15	333.33	487.50	22.65	414.57	389.40	195.73	448.52
11.4	9.4	7	0.50	0.50	0.40	19.00	3.47	118.1	25.00	469.57	664.98	334.26	493.78	22.82	420.30	391.97	197.03	454.37
11.5	9.5	7	0.50	0.50	0.40	19.00	3.47	119.4	25.00	475.85	666.81	335.18	500.06	22.99	426.08	394.53	198.31	460.25
11.6	9.6	7	0.50	0.50	0.40	19.00	3.46	120.6	25.00	482.14	668.65	336.10	506.35	23.16	431.90	397.09	199.60	466.16
11.7	9.7	8	0.70	0.50	0.73	33.10	27.37	121.9	42.15	492.73	3164.36	1590.58	516.08	42.15	442.50	3164.36	1590.58	475.89
11.8	9.8	8	0.70	0.50	0.73	33.10	27.35	123.2	42.50	503.41	3188.01	1602.47	525.88	42.50	453.18	3188.01	1602.47	485.69
11.9	9.9	9	0.70	0.50	0.86	37.70	44.38	124.4	50.54	516.11	5216.02	2621.86	537.30	50.54	465.88	5216.02	2621.86	497.11
12.0	10.0	9	0.70	0.50	0.86	37.70	44.35	125.7	50.95	528.92	5254.55	2641.23	548.80	50.95	478.69	5254.55	2641.23	508.61
12.1	10.1	9	0.70	0.50	0.86	37.70	44.32	126.9	51.36	541.83	5293.00	2660.55	560.38	51.36	491.60	5293.00	2660.55	520.20
12.2	10.2	9	0.70	0.50	0.86	37.70	44.29	128.2	51.77	554.84	5331.36	2679.83	572.05	51.77	504.61	5331.36	2679.83	531.86
12.3	10.3	9	0.70	0.50	0.86	37.70	44.25	129.4	52.18	567.96	5369.63	2699.07	583.80	52.18	517.72	5369.63	2699.07	543.61
12.4	10.4	9	0.70	0.50	0.86	37.70	44.22	130.7	52.59	581.18	5407.81	2718.26	595.63	52.59	530.94	5407.81	2718.26	555.44
12.5	10.5	9	0.70	0.50	0.86	37.70	44.19	131.9	53.00	594.50	5445.90	2737.41	607.54	53.00	544.26	5445.90	2737.41	567.36
12.6	10.6	9	0.70	0.50	0.86	37.70	44.15	133.2	53.41	607.92	5483.90	2756.51	619.54	53.41	557.69	5483.90	2756.51	579.35
12.7	10.7	9	0.70	0.50	0.86	37.70	44.12	134.5	53.82	621.45	5521.81	2775.57	631.62	53.82	571.22	5521.81	2775.57	591.43
12.8	10.8	9	0.70	0.50	0.86	37.70	44.09	135.7	54.23	635.08	5559.63	2794.58	643.78	54.23	584.85	5559.63	2794.58	603.59
12.9	10.9	9	0.70	0.50	0.86	37.70	44.05	137.0	54.65	648.81	5597.36	2813.54	656.02	54.65	598.58	5597.36	2813.54	615.84
13.0	11.0	9	0.70	0.50	0.86	37.70	44.02	138.2	55.06	662.65	5634.99	2832.46	668.35	55.06	612.42	5634.99	2832.46	628.16
13.1	11.1	9	0.70	0.50	0.86	37.70	43.98	139.5	55.47	676.59	5672.53	2851.32	680.76	55.47	626.36	5672.53	2851.32	640.57
13.2	11.2	9	0.70	0.50	0.86	37.70	43.95	140.7	55.88	690.63	5709.98	2870.15	693.25	55.88	640.40	5709.98	2870.15	653.06
13.3	11.3	9	0.70	0.50	0.86	37.70	43.91	142.0	56.29	704.78	5747.33	2888.92	705.82	56.29	654.55	5747.33	2888.92	665.64
13.4	11.4	9	0.70	0.50	0.86	37.70	43.88	143.3	56.70	719.03	5784.58	2907.65	718.48	56.70	668.80	5784.58	2907.65	678.29
13.5	11.5	10	0.70	0.50	0.73	33.10	26.97	144.5	48.41	731.20	3581.31	1800.16	729.47	48.41	680.96	3581.31	1800.16	689.28
13.6	11.6	10	0.70	0.50	0.73	33.10	26.95	145.8	48.76	743.45	3603.91	1811.52	740.53	48.76	693.22	3603.91	1811.52	700.35

13.7	11.7	10	0.70	0.50	0.73	33.10	26.92	147.0	49.11	755.80	3626.44	1822.85	751.66	49.11	705.56	3626.44	1822.85	711.48
13.8	11.8	10	0.70	0.50	0.73	33.10	26.90	148.3	49.46	768.23	3648.91	1834.14	762.86	49.46	717.99	3648.91	1834.14	722.68
13.9	11.9	10	0.70	0.50	0.73	33.10	26.88	149.5	49.81	780.74	3671.31	1845.40	774.13	49.81	730.51	3671.31	1845.40	733.95
14.0	12.0	10	0.70	0.50	0.73	33.10	26.85	150.8	50.15	793.35	3693.65	1856.63	785.47	50.15	743.12	3693.65	1856.63	745.29
14.1	12.1	10	0.70	0.50	0.73	33.10	26.83	152.1	50.50	806.04	3715.93	1867.83	796.89	50.50	755.81	3715.93	1867.83	756.70
14.2	12.2	10	0.70	0.50	0.73	33.10	26.80	153.3	50.85	818.82	3738.14	1878.99	808.37	50.85	768.59	3738.14	1878.99	768.18
14.3	12.3	10	0.70	0.50	0.73	33.10	26.78	154.6	51.20	831.69	3760.28	1890.12	819.92	51.20	781.45	3760.28	1890.12	779.73
14.4	12.4	10	0.70	0.50	0.73	33.10	26.75	155.8	51.55	844.64	3782.36	1901.22	831.54	51.55	794.41	3782.36	1901.22	791.35
14.5	12.5	10	0.70	0.50	0.73	33.10	26.73	157.1	51.89	857.68	3804.37	1912.29	843.23	51.89	807.45	3804.37	1912.29	803.04
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	873.17	6223.90	3128.47	856.87	61.62	822.94	6223.90	3128.47	816.69
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	888.76	6259.84	3146.54	870.60	62.03	838.53	6259.84	3146.54	830.42
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	904.45	6295.68	3164.55	884.41	62.44	854.22	6295.68	3164.55	844.23
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	920.25	6333.77	3183.70	898.31	62.85	870.02	6333.77	3183.70	858.12
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	936.15	6371.82	3202.83	912.28	63.26	885.92	6371.82	3202.83	872.10
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	952.15	6409.83	3221.93	926.34	63.67	901.92	6409.83	3221.93	886.15
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	968.26	6447.80	3241.02	940.48	64.08	918.02	6447.80	3241.02	900.30
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	984.47	6485.73	3260.09	954.71	64.49	934.23	6485.73	3260.09	914.52
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	1000.78	6523.62	3279.13	969.01	64.90	950.55	6523.62	3279.13	928.83
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	1017.19	6561.47	3298.15	983.40	65.31	966.96	6561.47	3298.15	943.21
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	1033.71	6599.28	3317.16	997.87	65.72	983.48	6599.28	3317.16	957.69
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	1050.33	6637.04	3336.14	1012.42	66.13	1000.10	6637.04	3336.14	972.24
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	1067.06	6674.77	3355.10	1027.06	66.54	1016.82	6674.77	3355.10	986.87
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	1083.88	6712.45	3374.05	1041.78	66.95	1033.65	6712.45	3374.05	1001.59
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	1100.81	6750.09	3392.97	1056.58	67.36	1050.58	6750.09	3392.97	1016.39
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	1117.85	6787.70	3411.87	1071.46	67.77	1067.61	6787.70	3411.87	1031.28
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	1134.98	6825.26	3430.75	1086.43	68.18	1084.75	6825.26	3430.75	1046.24
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.15	1149.60	4219.86	2121.13	1099.38	58.15	1099.37	4219.86	2121.13	1059.19
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.50	1164.30	4242.99	2132.76	1112.40	58.50	1114.07	4242.99	2132.76	1072.21
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	58.85	1179.09	4266.10	2144.38	1125.49	58.85	1128.86	4266.10	2144.38	1085.30
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.20	1193.97	4289.18	2155.98	1138.65	59.20	1143.74	4289.18	2155.98	1098.46
16.7	14.7	12	0.70	0.50	0.73	33.10	26.40	184.7	59.55	1208.94	4312.24	2167.57	1151.88	59.55	1158.70	4312.24	2167.57	1111.69
16.8	14.8	12	0.70	0.50	0.73	33.10	26.39	186.0	59.89	1223.99	4335.28	2179.15	1165.17	59.89	1173.76	4335.28	2179.15	1124.99
16.9	14.9	12	0.70	0.50	0.73	33.10	26.38	187.2	60.24	1239.13	4358.29	2190.71	1178.54	60.24	1188.90	4358.29	2190.71	1138.36
17.0	15.0	12	0.70	0.50	0.73	33.10	26.37	188.5	60.59	1254.36	4381.27	2202.27	1191.98	60.59	1204.12	4381.27	2202.27	1151.80

1.2.1.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.4	19.35			0.70	0.50	0.00
2	2.4	4.4	19.35			0.70	0.50	0.00
3	4.4	5.2	18.33	22	25	0.70	0.50	0.40
4	5.2	5.9	19.35			0.70	0.50	0.00
5	5.9	9.8	18.33	22	30	0.66	0.50	0.40
6	9.8	10.6	19.35	34		0.70	0.50	0.67
7	10.6	11.6	18.33	22	50	0.50	0.50	0.40
8	11.6	11.8	19.35			0.70	0.50	0.00
9	11.8	13.4	19.35	41		0.70	0.50	0.86
10	13.4	14.5	19.35			0.70	0.50	0.00
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35			0.70	0.50	0.00
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35			0.70	0.50	0.00
15	26.0	27.9	18.33	22	175	0.35	0.50	0.40

1.2.1.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO
Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1449	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	2.83
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	5.65
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	8.48
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	14.14
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	16.96
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	19.79
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	25.45
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	28.27
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	31.10
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	33.93
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	36.76
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	39.58
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	42.41
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	45.24
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	48.07
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	50.89
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	53.72
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	56.55
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	59.38
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	62.2	0.00	0.00	0.00	0.00	62.20

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	65.0	0.00	0.00	0.00	0.00	65.03
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	67.9	0.00	0.00	0.00	0.00	67.86
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	70.7	17.50	6.60	311.97	352.83	75.96
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	73.5	17.50	13.19	313.81	354.91	84.07
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	76.3	17.50	19.79	315.64	356.98	92.17
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	79.2	17.50	26.39	317.47	359.05	100.28
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	82.0	17.50	32.99	319.31	361.13	108.38
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	84.8	17.50	39.58	321.14	363.20	116.49
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	87.7	17.50	46.18	322.97	365.27	124.60
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	90.5	17.50	52.78	324.80	367.34	132.70
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	52.78	0.00	0.00	135.53
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	52.78	0.00	0.00	138.36
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	52.78	0.00	0.00	141.18
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	52.78	0.00	0.00	144.01
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	52.78	0.00	0.00	146.84
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	52.78	0.00	0.00	149.67
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	52.78	0.00	0.00	152.49
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	60.24	385.18	435.63	161.29
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	67.71	387.02	437.70	170.09
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	75.17	388.85	439.78	178.89
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	82.64	390.68	441.85	187.69
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	90.10	392.51	443.92	196.49
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	97.57	394.35	446.00	205.29
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	105.03	396.18	448.07	214.09
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	112.49	398.01	450.14	222.88
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	119.96	399.85	452.22	231.68
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	127.42	401.68	454.29	240.48
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	134.89	403.51	456.36	249.28
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	142.35	405.35	458.43	258.08
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	149.82	407.18	460.51	266.88
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	157.28	409.01	462.58	275.68
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	164.75	410.84	464.65	284.48
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	172.21	412.68	466.73	293.28
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	179.67	414.51	468.80	302.08
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	187.14	416.34	470.87	310.87
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	194.60	418.18	472.95	319.67
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	202.07	420.01	475.02	328.47
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	209.53	421.84	477.09	337.27
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	217.00	423.68	479.17	346.07
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	224.46	425.51	481.24	354.87
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	231.92	427.34	483.31	363.67
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	239.39	429.17	485.38	372.47
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	246.85	431.01	487.46	381.27
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	254.32	432.84	489.53	390.07
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	261.78	434.67	491.60	398.86
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	269.25	436.51	493.68	407.66
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	276.71	438.34	495.75	416.46

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	284.18	440.17	497.82	425.26
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	291.64	442.01	499.90	434.06
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	299.10	443.84	501.97	442.86
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	306.57	445.67	504.04	451.66
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	314.03	447.50	506.12	460.46
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	321.50	449.34	508.19	469.26
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	328.96	451.17	510.26	478.05
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	336.43	453.00	512.33	486.85
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	220.5	19.80	343.89	454.84	514.41	495.65
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	223.4	33.29	356.44	2131.42	2410.58	508.52
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	226.2	33.61	369.11	2151.87	2433.70	521.49
10.1	8.1	6	0.70	0.50	0.67	30.80	21.43	229.0	33.93	381.90	2172.31	2456.82	534.55
10.2	8.2	6	0.70	0.50	0.67	30.80	21.43	231.8	34.25	394.82	2192.75	2479.95	547.70
10.3	8.3	6	0.70	0.50	0.67	30.80	21.43	234.7	34.57	407.85	2213.20	2503.07	560.96
10.4	8.4	6	0.70	0.50	0.67	30.80	21.43	237.5	34.89	421.00	2233.64	2526.19	574.31
10.5	8.5	6	0.70	0.50	0.67	30.80	21.43	240.3	35.21	434.27	2254.08	2549.31	587.75
10.6	8.6	6	0.70	0.50	0.67	30.80	21.43	243.2	35.53	447.67	2274.53	2572.43	601.29
10.7	8.7	7	0.50	0.50	0.40	19.00	3.57	246.0	25.00	457.09	652.15	737.56	611.66
10.8	8.8	7	0.50	0.50	0.40	19.00	3.57	248.8	25.00	466.52	653.98	739.64	622.03
10.9	8.9	7	0.50	0.50	0.40	19.00	3.57	251.6	25.00	475.94	655.82	741.71	632.40
11.0	9.0	7	0.50	0.50	0.40	19.00	3.57	254.5	25.00	485.37	657.65	743.78	642.76
11.1	9.1	7	0.50	0.50	0.40	19.00	3.57	257.3	25.00	494.79	659.48	745.86	653.13
11.2	9.2	7	0.50	0.50	0.40	19.00	3.57	260.1	25.00	504.22	661.31	747.93	663.50
11.3	9.3	7	0.50	0.50	0.40	19.00	3.57	263.0	25.00	513.64	663.15	750.00	673.86
11.4	9.4	7	0.50	0.50	0.40	19.00	3.57	265.8	25.00	523.07	664.98	752.07	684.23
11.5	9.5	7	0.50	0.50	0.40	19.00	3.57	268.6	25.00	532.49	666.81	754.15	694.60
11.6	9.6	7	0.50	0.50	0.40	19.00	3.57	271.4	25.00	541.92	668.65	756.22	704.97
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	274.3	0.00	541.92	0.00	0.00	707.79
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	277.1	0.00	541.92	0.00	0.00	710.62
11.9	9.9	9	0.70	0.50	0.86	37.70	45.33	279.9	50.54	560.97	5327.12	6024.83	728.69
12.0	10.0	9	0.70	0.50	0.86	37.70	45.31	282.7	50.95	580.18	5368.36	6071.47	746.89
12.1	10.1	9	0.70	0.50	0.86	37.70	45.29	285.6	51.36	599.54	5409.55	6118.06	765.20
12.2	10.2	9	0.70	0.50	0.86	37.70	45.28	288.4	51.77	619.06	5450.70	6164.60	783.65
12.3	10.3	9	0.70	0.50	0.86	37.70	45.26	291.2	52.18	638.73	5491.81	6211.09	802.21
12.4	10.4	9	0.70	0.50	0.86	37.70	45.24	294.1	52.59	658.56	5532.87	6257.53	820.90
12.5	10.5	9	0.70	0.50	0.86	37.70	45.23	296.9	53.00	678.54	5573.89	6303.92	839.71
12.6	10.6	9	0.70	0.50	0.86	37.70	45.21	299.7	53.41	698.68	5614.87	6350.27	858.65
12.7	10.7	9	0.70	0.50	0.86	37.70	45.19	302.5	53.82	718.97	5655.80	6396.56	877.71
12.8	10.8	9	0.70	0.50	0.86	37.70	45.17	305.4	54.23	739.42	5696.69	6442.80	896.90
12.9	10.9	9	0.70	0.50	0.86	37.70	45.16	308.2	54.65	760.02	5737.53	6488.99	916.20
13.0	11.0	9	0.70	0.50	0.86	37.70	45.14	311.0	55.06	780.77	5778.33	6535.14	935.64
13.1	11.1	9	0.70	0.50	0.86	37.70	45.12	313.8	55.47	801.68	5819.08	6581.23	955.19
13.2	11.2	9	0.70	0.50	0.86	37.70	45.10	316.7	55.88	822.75	5859.79	6627.26	974.87
13.3	11.3	9	0.70	0.50	0.86	37.70	45.08	319.5	56.29	843.97	5900.45	6673.25	994.67
13.4	11.4	9	0.70	0.50	0.86	37.70	45.07	322.3	56.70	865.34	5941.06	6719.19	1014.60
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	325.2	0.00	865.34	0.00	0.00	1017.43
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	328.0	0.00	865.34	0.00	0.00	1020.26

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	330.8	0.00	865.34	0.00	0.00	1023.08
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	333.6	0.00	865.34	0.00	0.00	1025.91
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	336.5	0.00	865.34	0.00	0.00	1028.74
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	339.3	0.00	865.34	0.00	0.00	1031.57
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	342.1	0.00	865.34	0.00	0.00	1034.39
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	344.9	0.00	865.34	0.00	0.00	1037.22
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	347.8	0.00	865.34	0.00	0.00	1040.05
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	350.6	0.00	865.34	0.00	0.00	1042.88
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	353.4	0.00	865.34	0.00	0.00	1045.70
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	888.57	6424.74	7266.21	1067.11
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	911.96	6464.73	7311.44	1088.65
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	935.50	6504.67	7356.61	1110.31
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	959.19	6544.56	7401.73	1132.09
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	983.04	6584.40	7446.78	1154.00
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1007.04	6624.19	7491.78	1176.03
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1031.20	6663.93	7536.72	1198.18
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1055.51	6703.61	7581.61	1220.46
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1079.98	6743.25	7626.43	1242.86
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1104.60	6782.83	7671.20	1265.39
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1129.38	6822.36	7715.90	1288.04
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1154.31	6861.83	7760.55	1310.81
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1179.40	6901.26	7805.14	1333.71
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1204.64	6940.63	7849.66	1356.73
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1230.04	6979.94	7894.13	1379.87
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1255.59	7019.21	7938.54	1403.14
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1281.29	7058.42	7982.88	1426.53
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1281.29	0.00	0.00	1429.36
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1281.29	0.00	0.00	1432.18
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1281.29	0.00	0.00	1435.01
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1281.29	0.00	0.00	1437.84
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	415.6	0.00	1281.29	0.00	0.00	1440.67
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	418.5	0.00	1281.29	0.00	0.00	1443.49
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1281.29	0.00	0.00	1446.32
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1281.29	0.00	0.00	1449.15

1.2.1.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1149	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	1.96
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	3.93
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	5.89
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	7.85
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	9.82
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	11.78
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	13.74
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	15.71
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	17.67
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	19.63
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	21.60
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	23.56
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	25.53
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	27.49
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	29.45
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	31.42
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	33.38
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	35.34
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	37.31
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	39.27
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	41.23
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	43.2	0.00	0.00	0.00	0.00	43.20

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	45.16
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	47.1	0.00	0.00	0.00	0.00	47.12
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	49.1	17.50	5.50	311.97	245.02	53.49
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	51.1	17.50	11.00	313.81	246.46	59.85
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	53.0	17.50	16.49	315.64	247.90	66.21
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	55.0	17.50	21.99	317.47	249.34	72.57
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	56.9	17.50	27.49	319.31	250.78	78.93
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	58.9	17.50	32.99	321.14	252.22	85.29
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	60.9	17.50	38.48	322.97	253.66	91.66
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	62.8	17.50	43.98	324.80	255.10	98.02
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	43.98	0.00	0.00	99.98
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	43.98	0.00	0.00	101.94
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	43.98	0.00	0.00	103.91
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	43.98	0.00	0.00	105.87
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	43.98	0.00	0.00	107.84
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	43.98	0.00	0.00	109.80
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	43.98	0.00	0.00	111.76
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	50.20	385.18	302.52	118.70
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	56.42	387.02	303.96	125.64
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	62.64	388.85	305.40	132.58
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	68.86	390.68	306.84	139.52
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	75.08	392.51	308.28	146.46
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	81.30	394.35	309.72	153.40
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	87.52	396.18	311.16	160.34
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	93.75	398.01	312.60	167.28
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	99.97	399.85	314.04	174.22
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	106.19	401.68	315.48	181.16
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	112.41	403.51	316.92	188.10
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	118.63	405.35	318.36	195.04
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	124.85	407.18	319.80	201.98
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	131.07	409.01	321.24	208.92
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	137.29	410.84	322.68	215.86
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	143.51	412.68	324.12	222.80
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	149.73	414.51	325.56	229.74
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	155.95	416.34	327.00	236.68
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	162.17	418.18	328.43	243.62
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	168.39	420.01	329.87	250.56
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	174.61	421.84	331.31	257.50
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	180.83	423.68	332.75	264.44
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	187.05	425.51	334.19	271.38
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	193.27	427.34	335.63	278.32
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	199.49	429.17	337.07	285.26
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	205.71	431.01	338.51	292.20
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	211.93	432.84	339.95	299.14
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	218.15	434.67	341.39	306.08
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	224.37	436.51	342.83	313.02
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	230.59	438.34	344.27	319.96

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	236.81	440.17	345.71	326.90
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	243.03	442.01	347.15	333.84
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	249.25	443.84	348.59	340.77
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	255.47	445.67	350.03	347.71
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	261.69	447.50	351.47	354.65
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	267.92	449.34	352.91	361.59
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	274.14	451.17	354.35	368.53
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	280.36	453.00	355.79	375.47
9.8	7.8	5	0.66	0.50	0.40	19.00	3.57	153.2	19.80	286.58	454.84	357.23	382.41
9.9	7.9	6	0.70	0.50	0.67	30.80	21.43	155.1	33.29	297.04	2131.42	1674.01	392.74
10.0	8.0	6	0.70	0.50	0.67	30.80	21.43	157.1	33.61	307.59	2151.87	1690.07	403.16
10.1	8.1	6	0.70	0.50	0.67	30.80	21.42	159.0	33.93	318.25	2171.20	1705.25	413.65
10.2	8.2	6	0.70	0.50	0.67	30.80	21.41	161.0	34.25	329.01	2190.50	1720.42	424.22
10.3	8.3	6	0.70	0.50	0.67	30.80	21.40	163.0	34.57	339.87	2209.78	1735.56	434.87
10.4	8.4	6	0.70	0.50	0.67	30.80	21.39	164.9	34.89	350.83	2229.03	1750.68	445.60
10.5	8.5	6	0.70	0.50	0.67	30.80	21.37	166.9	35.21	361.90	2248.26	1765.78	456.41
10.6	8.6	6	0.70	0.50	0.67	30.80	21.36	168.9	35.53	373.06	2267.45	1780.85	467.31
10.7	8.7	7	0.50	0.50	0.40	19.00	3.55	170.8	25.00	380.91	652.15	512.20	475.55
10.8	8.8	7	0.50	0.50	0.40	19.00	3.55	172.8	25.00	388.76	653.98	513.64	483.80
10.9	8.9	7	0.50	0.50	0.40	19.00	3.55	174.8	25.00	396.62	655.82	515.08	492.05
11.0	9.0	7	0.50	0.50	0.40	19.00	3.54	176.7	25.00	404.47	657.65	516.52	500.29
11.1	9.1	7	0.50	0.50	0.40	19.00	3.54	178.7	25.00	412.33	659.48	517.96	508.54
11.2	9.2	7	0.50	0.50	0.40	19.00	3.54	180.6	25.00	420.18	661.31	519.39	516.79
11.3	9.3	7	0.50	0.50	0.40	19.00	3.54	182.6	25.00	428.03	663.15	520.83	525.03
11.4	9.4	7	0.50	0.50	0.40	19.00	3.53	184.6	25.00	435.89	664.98	522.27	533.28
11.5	9.5	7	0.50	0.50	0.40	19.00	3.53	186.5	25.00	443.74	666.81	523.71	541.53
11.6	9.6	7	0.50	0.50	0.40	19.00	3.53	188.5	25.00	451.60	668.65	525.15	549.77
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	190.5	0.00	451.60	0.00	0.00	551.74
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	192.4	0.00	451.60	0.00	0.00	553.70
11.9	9.9	9	0.70	0.50	0.86	37.70	44.98	194.4	50.54	467.48	5285.79	4151.45	568.37
12.0	10.0	9	0.70	0.50	0.86	37.70	44.95	196.3	50.95	483.48	5326.04	4183.06	583.14
12.1	10.1	9	0.70	0.50	0.86	37.70	44.93	198.3	51.36	499.62	5366.23	4214.63	598.01
12.2	10.2	9	0.70	0.50	0.86	37.70	44.91	200.3	51.77	515.88	5406.36	4246.15	612.98
12.3	10.3	9	0.70	0.50	0.86	37.70	44.89	202.2	52.18	532.28	5446.44	4277.62	628.06
12.4	10.4	9	0.70	0.50	0.86	37.70	44.86	204.2	52.59	548.80	5486.45	4309.05	643.24
12.5	10.5	9	0.70	0.50	0.86	37.70	44.84	206.2	53.00	565.45	5526.41	4340.43	658.53
12.6	10.6	9	0.70	0.50	0.86	37.70	44.82	208.1	53.41	582.23	5566.31	4371.77	673.92
12.7	10.7	9	0.70	0.50	0.86	37.70	44.79	210.1	53.82	599.14	5606.14	4403.05	689.41
12.8	10.8	9	0.70	0.50	0.86	37.70	44.77	212.1	54.23	616.18	5645.91	4434.29	705.00
12.9	10.9	9	0.70	0.50	0.86	37.70	44.75	214.0	54.65	633.35	5685.63	4465.48	720.70
13.0	11.0	9	0.70	0.50	0.86	37.70	44.72	216.0	55.06	650.64	5725.28	4496.62	736.50
13.1	11.1	9	0.70	0.50	0.86	37.70	44.70	217.9	55.47	668.07	5764.87	4527.72	752.40
13.2	11.2	9	0.70	0.50	0.86	37.70	44.68	219.9	55.88	685.62	5804.39	4558.76	768.41
13.3	11.3	9	0.70	0.50	0.86	37.70	44.65	221.9	56.29	703.31	5843.85	4589.75	784.52
13.4	11.4	9	0.70	0.50	0.86	37.70	44.63	223.8	56.70	721.12	5883.25	4620.70	800.73
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	225.8	0.00	721.12	0.00	0.00	802.70
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	227.8	0.00	721.12	0.00	0.00	804.66

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	229.7	0.00	721.12	0.00	0.00	806.62
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	231.7	0.00	721.12	0.00	0.00	808.59
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	233.7	0.00	721.12	0.00	0.00	810.55
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	235.6	0.00	721.12	0.00	0.00	812.51
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	237.6	0.00	721.12	0.00	0.00	814.48
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	239.5	0.00	721.12	0.00	0.00	816.44
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	241.5	0.00	721.12	0.00	0.00	818.40
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	243.5	0.00	721.12	0.00	0.00	820.37
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	245.4	0.00	721.12	0.00	0.00	822.33
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	740.48	6350.93	4988.01	839.78
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	759.96	6389.47	5018.28	857.34
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	779.58	6427.93	5048.49	874.99
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	799.33	6466.33	5078.64	892.75
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	819.20	6504.65	5108.74	910.61
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	839.20	6542.91	5138.79	928.58
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	859.33	6581.09	5168.78	946.65
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	879.60	6619.20	5198.71	964.82
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	899.99	6657.24	5228.58	983.10
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	920.50	6695.20	5258.40	1001.47
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	941.15	6733.10	5288.16	1019.96
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	961.93	6770.92	5317.87	1038.54
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	982.83	6808.66	5347.51	1057.23
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1003.87	6846.33	5377.10	1076.02
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1025.03	6883.93	5406.63	1094.91
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1046.32	6921.45	5436.10	1113.91
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1067.74	6958.90	5465.51	1133.01
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1067.74	0.00	0.00	1134.97
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1067.74	0.00	0.00	1136.94
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1067.74	0.00	0.00	1138.90
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1067.74	0.00	0.00	1140.86
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	288.6	0.00	1067.74	0.00	0.00	1142.83
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	290.6	0.00	1067.74	0.00	0.00	1144.79
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1067.74	0.00	0.00	1146.76
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1067.74	0.00	0.00	1148.72

1.2.1.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	872	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	1.26
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	2.51
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	3.77
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	5.03
2.5	0.5	2	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	6.28
2.6	0.6	2	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	7.54
2.7	0.7	2	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	8.80
2.8	0.8	2	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	10.05
2.9	0.9	2	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
3.0	1.0	2	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	12.57
3.1	1.1	2	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	13.82
3.2	1.2	2	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	15.08
3.3	1.3	2	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	16.34
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	17.59
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	18.85
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	20.11
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	21.36
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	23.88
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	25.13
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	26.39
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	27.6	0.00	0.00	0.00	0.00	27.65

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	28.9	0.00	0.00	0.00	0.00	28.90
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	30.2	0.00	0.00	0.00	0.00	30.16
4.5	2.5	3	0.70	0.50	0.40	19.00	3.57	31.4	17.50	4.40	311.97	156.81	34.93
4.6	2.6	3	0.70	0.50	0.40	19.00	3.57	32.7	17.50	8.80	313.81	157.74	39.71
4.7	2.7	3	0.70	0.50	0.40	19.00	3.57	33.9	17.50	13.19	315.64	158.66	44.48
4.8	2.8	3	0.70	0.50	0.40	19.00	3.57	35.2	17.50	17.59	317.47	159.58	49.26
4.9	2.9	3	0.70	0.50	0.40	19.00	3.57	36.4	17.50	21.99	319.31	160.50	54.04
5.0	3.0	3	0.70	0.50	0.40	19.00	3.57	37.7	17.50	26.39	321.14	161.42	58.81
5.1	3.1	3	0.70	0.50	0.40	19.00	3.57	39.0	17.50	30.79	322.97	162.34	63.59
5.2	3.2	3	0.70	0.50	0.40	19.00	3.57	40.2	17.50	35.19	324.80	163.26	68.36
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	35.19	0.00	0.00	69.62
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	35.19	0.00	0.00	70.87
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	35.19	0.00	0.00	72.13
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	35.19	0.00	0.00	73.39
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	35.19	0.00	0.00	74.64
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	35.19	0.00	0.00	75.90
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	35.19	0.00	0.00	77.16
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	40.16	385.18	193.61	82.40
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	45.14	387.02	194.53	87.63
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	50.11	388.85	195.46	92.87
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	55.09	390.68	196.38	98.11
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	60.07	392.51	197.30	103.35
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	65.04	394.35	198.22	108.58
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	70.02	396.18	199.14	113.82
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	75.00	398.01	200.06	119.06
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	79.97	399.85	200.98	124.30
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	84.95	401.68	201.91	129.53
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	89.92	403.51	202.83	134.77
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	94.90	405.35	203.75	140.01
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	99.88	407.18	204.67	145.25
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	104.85	409.01	205.59	150.48
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	109.83	410.84	206.51	155.72
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	114.81	412.68	207.43	160.96
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	119.78	414.51	208.36	166.20
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	124.76	416.34	209.28	171.44
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	129.74	418.18	210.20	176.67
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	134.71	420.01	211.12	181.91
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	139.69	421.84	212.04	187.15
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	144.66	423.68	212.96	192.39
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	149.64	425.51	213.88	197.62
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	154.62	427.34	214.81	202.86
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	159.59	429.17	215.73	208.10
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	164.57	431.01	216.65	213.34
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	169.55	432.84	217.57	218.57
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	174.52	434.67	218.49	223.81
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	179.50	436.51	219.41	229.05
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	184.47	438.34	220.33	234.29

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	189.45	440.17	221.25	239.53
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	194.43	442.01	222.18	244.76
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	199.40	443.84	223.10	250.00
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	204.38	445.67	224.02	255.24
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	209.36	447.50	224.94	260.48
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	214.33	449.34	225.86	265.71
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	219.31	451.17	226.78	270.95
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	224.28	453.00	227.70	276.19
9.8	7.8	5	0.66	0.50	0.40	19.00	3.52	98.0	19.80	229.26	454.84	228.63	281.43
9.9	7.9	6	0.70	0.50	0.67	30.80	21.21	99.3	33.29	237.63	2110.01	1060.61	289.38
10.0	8.0	6	0.70	0.50	0.67	30.80	21.20	100.5	33.61	246.08	2128.74	1070.02	297.39
10.1	8.1	6	0.70	0.50	0.67	30.80	21.18	101.8	33.93	254.60	2147.42	1079.41	305.47
10.2	8.2	6	0.70	0.50	0.67	30.80	21.17	103.0	34.25	263.21	2166.07	1088.79	313.61
10.3	8.3	6	0.70	0.50	0.67	30.80	21.15	104.3	34.57	271.90	2184.68	1098.14	321.82
10.4	8.4	6	0.70	0.50	0.67	30.80	21.14	105.6	34.89	280.67	2203.25	1107.47	330.09
10.5	8.5	6	0.70	0.50	0.67	30.80	21.12	106.8	35.21	289.52	2221.78	1116.79	338.43
10.6	8.6	6	0.70	0.50	0.67	30.80	21.11	108.1	35.53	298.45	2240.27	1126.08	346.83
10.7	8.7	7	0.50	0.50	0.40	19.00	3.49	109.3	25.00	304.73	652.15	327.81	353.11
10.8	8.8	7	0.50	0.50	0.40	19.00	3.49	110.6	25.00	311.01	653.98	328.73	359.39
10.9	8.9	7	0.50	0.50	0.40	19.00	3.49	111.8	25.00	317.30	655.82	329.65	365.68
11.0	9.0	7	0.50	0.50	0.40	19.00	3.48	113.1	25.00	323.58	657.65	330.57	371.96
11.1	9.1	7	0.50	0.50	0.40	19.00	3.48	114.4	25.00	329.86	659.48	331.49	378.24
11.2	9.2	7	0.50	0.50	0.40	19.00	3.48	115.6	25.00	336.14	661.31	332.41	384.53
11.3	9.3	7	0.50	0.50	0.40	19.00	3.47	116.9	25.00	342.43	663.15	333.33	390.81
11.4	9.4	7	0.50	0.50	0.40	19.00	3.47	118.1	25.00	348.71	664.98	334.26	397.09
11.5	9.5	7	0.50	0.50	0.40	19.00	3.47	119.4	25.00	354.99	666.81	335.18	403.38
11.6	9.6	7	0.50	0.50	0.40	19.00	3.46	120.6	25.00	361.28	668.65	336.10	409.66
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	121.9	0.00	361.28	0.00	0.00	410.92
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	123.2	0.00	361.28	0.00	0.00	412.17
11.9	9.9	9	0.70	0.50	0.86	37.70	44.38	124.4	50.54	373.98	5216.02	2621.86	423.59
12.0	10.0	9	0.70	0.50	0.86	37.70	44.35	125.7	50.95	386.79	5254.55	2641.23	435.09
12.1	10.1	9	0.70	0.50	0.86	37.70	44.32	126.9	51.36	399.69	5293.00	2660.55	446.68
12.2	10.2	9	0.70	0.50	0.86	37.70	44.29	128.2	51.77	412.71	5331.36	2679.83	458.34
12.3	10.3	9	0.70	0.50	0.86	37.70	44.25	129.4	52.18	425.82	5369.63	2699.07	470.09
12.4	10.4	9	0.70	0.50	0.86	37.70	44.22	130.7	52.59	439.04	5407.81	2718.26	481.92
12.5	10.5	9	0.70	0.50	0.86	37.70	44.19	131.9	53.00	452.36	5445.90	2737.41	493.84
12.6	10.6	9	0.70	0.50	0.86	37.70	44.15	133.2	53.41	465.79	5483.90	2756.51	505.83
12.7	10.7	9	0.70	0.50	0.86	37.70	44.12	134.5	53.82	479.31	5521.81	2775.57	517.91
12.8	10.8	9	0.70	0.50	0.86	37.70	44.09	135.7	54.23	492.94	5559.63	2794.58	530.07
12.9	10.9	9	0.70	0.50	0.86	37.70	44.05	137.0	54.65	506.68	5597.36	2813.54	542.32
13.0	11.0	9	0.70	0.50	0.86	37.70	44.02	138.2	55.06	520.52	5634.99	2832.46	554.64
13.1	11.1	9	0.70	0.50	0.86	37.70	43.98	139.5	55.47	534.46	5672.53	2851.32	567.05
13.2	11.2	9	0.70	0.50	0.86	37.70	43.95	140.7	55.88	548.50	5709.98	2870.15	579.54
13.3	11.3	9	0.70	0.50	0.86	37.70	43.91	142.0	56.29	562.65	5747.33	2888.92	592.12
13.4	11.4	9	0.70	0.50	0.86	37.70	43.88	143.3	56.70	576.89	5784.58	2907.65	604.77
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	144.5	0.00	576.89	0.00	0.00	606.03
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	145.8	0.00	576.89	0.00	0.00	607.29

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	147.0	0.00	576.89	0.00	0.00	608.54
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	148.3	0.00	576.89	0.00	0.00	609.80
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	149.5	0.00	576.89	0.00	0.00	611.06
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	150.8	0.00	576.89	0.00	0.00	612.31
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	152.1	0.00	576.89	0.00	0.00	613.57
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	153.3	0.00	576.89	0.00	0.00	614.83
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	154.6	0.00	576.89	0.00	0.00	616.08
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	155.8	0.00	576.89	0.00	0.00	617.34
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	157.1	0.00	576.89	0.00	0.00	618.60
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	592.38	6223.90	3128.47	632.24
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	607.97	6259.84	3146.54	645.97
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	623.66	6295.68	3164.55	659.78
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	639.46	6333.77	3183.70	673.67
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	655.36	6371.82	3202.83	687.65
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	671.36	6409.83	3221.93	701.71
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	687.47	6447.80	3241.02	715.85
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	703.68	6485.73	3260.09	730.07
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	719.99	6523.62	3279.13	744.38
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	736.40	6561.47	3298.15	758.77
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	752.92	6599.28	3317.16	773.24
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	769.54	6637.04	3336.14	787.79
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	786.27	6674.77	3355.10	802.43
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	803.09	6712.45	3374.05	817.15
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	820.02	6750.09	3392.97	831.95
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	837.06	6787.70	3411.87	846.83
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	854.19	6825.26	3430.75	861.80
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	854.19	0.00	0.00	863.05
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	854.19	0.00	0.00	864.31
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	854.19	0.00	0.00	865.57
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	854.19	0.00	0.00	866.82
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	184.7	0.00	854.19	0.00	0.00	868.08
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	186.0	0.00	854.19	0.00	0.00	869.34
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	187.2	0.00	854.19	0.00	0.00	870.59
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	188.5	0.00	854.19	0.00	0.00	871.85

1.2.2 Calcolo del carico limite con riferimento alla prova CPTu4

1.2.2.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	2.0	19.35	35		0.70	0.50	0.70
2	2.0	2.9	19.35	35		0.70	0.50	0.70
3	2.9	4.3	18.33	22	40	0.58	0.50	0.40
4	4.3	5.9	19.35	36		0.70	0.50	0.73
5	5.9	11.0	18.33	22	50	0.50	0.50	0.40
6	11.0	11.6	19.35	41		0.70	0.50	0.86
7	11.6	11.8	19.35	38		0.70	0.50	0.79
8	11.8	14.7	19.35	41		0.70	0.50	0.86
9	14.7	14.9	19.35	38		0.70	0.50	0.79
10	14.9	16.8	19.35	42		0.70	0.50	0.90
11	16.8	17.4	19.35	38		0.70	0.50	0.79
12	17.4	17.8	19.35	41		0.70	0.50	0.86
13	17.8	18.0	19.35	38		0.70	0.50	0.79

1.2.2.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	CLS gettato in opera	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	2115	1939

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.8	10.43	3.93	732.75	828.73	5.97	10.43	3.93	732.75	828.73	5.97
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	5.7	10.76	7.99	756.18	855.22	12.05	10.76	7.99	756.18	855.22	12.05
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	8.5	11.10	12.17	779.60	881.71	18.22	11.10	12.17	779.60	881.71	18.22
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	11.3	11.43	16.48	803.02	908.20	24.49	11.43	16.48	803.02	908.20	24.49
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	14.1	11.76	20.92	826.45	934.69	30.87	11.76	20.92	826.45	934.69	30.87
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	17.0	12.10	25.48	849.87	961.18	37.34	12.10	25.48	849.87	961.18	37.34
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	19.8	12.43	30.16	873.29	987.67	43.92	12.43	30.16	873.29	987.67	43.92
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	22.6	12.76	34.97	896.72	1014.16	50.60	12.76	34.97	896.72	1014.16	50.60
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	25.4	13.10	39.91	920.14	1040.66	57.37	13.10	39.91	920.14	1040.66	57.37
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	28.3	23.20	48.66	417.95	472.69	67.20	7.74	42.83	136.72	154.63	62.54
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	31.1	23.20	57.40	419.78	474.76	77.02	7.91	45.81	139.76	158.07	67.75
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	33.9	23.20	66.15	421.61	476.83	86.85	8.09	48.86	142.80	161.51	73.02
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	36.8	23.20	74.89	423.45	478.91	96.67	8.26	51.97	145.84	164.94	78.34
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	39.6	23.20	83.64	425.28	480.98	106.50	8.43	55.15	148.88	168.38	83.71
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	42.4	23.20	92.39	427.11	483.05	116.32	8.60	58.40	151.92	171.82	89.13
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	101.13	428.95	485.13	126.15	8.78	61.70	154.96	175.26	94.60
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	48.1	23.20	109.88	430.78	487.20	135.97	8.95	65.08	158.00	178.69	100.13
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	50.9	23.20	118.63	432.61	489.27	145.79	9.12	68.52	161.04	182.13	105.71
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	53.7	23.20	127.37	434.45	491.35	155.62	9.29	72.02	164.08	185.57	111.34
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	56.5	23.20	136.12	436.28	493.42	165.44	9.46	75.59	167.12	189.01	117.02
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	59.4	23.20	144.86	438.11	495.49	175.27	9.64	79.22	170.16	192.44	122.75
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	62.2	23.20	153.61	439.94	497.56	185.09	9.81	82.92	173.20	195.88	128.54

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	65.0	23.20	162.36	441.78	499.64	194.92	9.98	86.68	176.24	199.32	134.37
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	67.9	18.36	169.28	1409.84	1594.49	203.28	18.36	93.60	1409.84	1594.49	142.74
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	70.7	18.71	176.33	1436.55	1624.70	211.75	18.71	100.65	1436.55	1624.70	151.21
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	73.5	19.06	183.52	1463.25	1654.90	220.33	19.06	107.84	1463.25	1654.90	159.78
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	76.3	19.40	190.83	1489.96	1685.11	229.01	19.40	115.15	1489.96	1685.11	168.46
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	79.2	19.75	198.28	1516.67	1715.32	237.79	19.75	122.60	1516.67	1715.32	177.25
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	82.0	20.10	205.85	1543.38	1745.52	246.68	20.10	130.18	1543.38	1745.52	186.14
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	84.8	20.45	213.56	1570.09	1775.73	255.67	20.45	137.89	1570.09	1775.73	195.13
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	87.7	20.80	221.40	1596.80	1805.93	264.77	20.80	145.73	1596.80	1805.93	204.23
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	90.5	21.14	229.37	1623.51	1836.14	273.98	21.14	153.70	1623.51	1836.14	213.44
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	93.3	21.49	237.48	1650.21	1866.35	283.29	21.49	161.80	1650.21	1866.35	222.74
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	96.1	21.84	245.71	1676.92	1896.55	292.70	21.84	170.03	1676.92	1896.55	232.16
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	99.0	22.19	254.07	1703.63	1926.76	302.22	22.19	178.40	1703.63	1926.76	241.68
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	101.8	22.53	262.57	1730.34	1956.97	311.84	22.53	186.89	1730.34	1956.97	251.30
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	104.6	22.88	271.20	1757.05	1987.17	321.57	22.88	195.52	1757.05	1987.17	261.03
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	107.4	23.23	279.95	1783.76	2017.38	331.40	23.23	204.28	1783.76	2017.38	270.86
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	110.3	23.58	288.84	1810.46	2047.59	341.34	23.58	213.17	1810.46	2047.59	280.80
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	113.1	25.00	298.27	564.57	638.51	351.71	13.24	218.16	233.73	264.34	287.62
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	115.9	25.00	307.69	566.40	640.59	362.08	13.41	223.21	236.76	267.77	294.49
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	118.8	25.00	317.12	568.24	642.66	372.45	13.58	228.33	239.80	271.21	301.42
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	121.6	25.00	326.54	570.07	644.73	382.81	13.75	233.51	242.84	274.65	308.39
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	124.4	25.00	335.97	571.90	646.81	393.18	13.92	238.76	245.88	278.09	315.42
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	127.2	25.00	345.39	573.74	648.88	403.55	14.10	244.08	248.92	281.52	322.50
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	130.1	25.00	354.82	575.57	650.95	413.91	14.27	249.46	251.96	284.96	329.63
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	132.9	25.00	364.24	577.40	653.03	424.28	14.44	254.90	255.00	288.40	336.81
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	135.7	25.00	373.66	579.23	655.10	434.65	14.61	260.41	258.04	291.84	344.04
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	138.5	25.00	383.09	581.07	657.17	445.02	14.78	265.98	261.08	295.27	351.33
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	392.51	582.90	659.24	455.38	14.96	271.62	264.12	298.71	358.67
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	144.2	25.00	401.94	584.73	661.32	465.75	15.13	277.33	267.16	302.15	366.06
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	147.0	25.00	411.36	586.57	663.39	476.12	15.30	283.09	270.20	305.58	373.50
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	149.9	25.00	420.79	588.40	665.46	486.49	15.47	288.93	273.24	309.02	381.00
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	152.7	25.00	430.21	590.23	667.54	496.85	15.65	294.83	276.27	312.46	388.54
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	155.5	25.00	439.64	592.07	669.61	507.22	15.82	300.79	279.31	315.90	396.14
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	158.3	25.00	449.06	593.90	671.68	517.59	15.99	306.82	282.35	319.33	403.79
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	161.2	25.00	458.49	595.73	673.76	527.95	16.16	312.91	285.39	322.77	411.49
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	164.0	25.00	467.91	597.56	675.83	538.32	16.33	319.07	288.43	326.21	419.24
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	166.8	25.00	477.34	599.40	677.90	548.69	16.51	325.29	291.47	329.65	427.05
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	169.6	25.00	486.76	601.23	679.98	559.06	16.68	331.58	294.51	333.08	434.91
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	172.5	25.00	496.19	603.06	682.05	569.42	16.85	337.93	297.55	336.52	442.82
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	175.3	25.00	505.61	604.90	684.12	579.79	17.02	344.35	300.59	339.96	450.78
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	178.1	25.00	515.04	606.73	686.19	590.16	17.19	350.83	303.63	343.40	458.79
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	181.0	25.00	524.46	608.56	688.27	600.52	17.37	357.38	306.67	346.83	466.86
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	183.8	25.00	533.89	610.40	690.34	610.89	17.54	363.99	309.71	350.27	474.97
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	186.6	25.00	543.31	612.23	692.41	621.26	17.71	370.67	312.75	353.71	483.14
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	189.4	25.00	552.74	614.06	694.49	631.63	17.88	377.41	315.79	357.15	491.36
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	192.3	25.00	562.16	615.89	696.56	641.99	18.06	384.21	318.82	360.58	499.64
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	195.1	25.00	571.59	617.73	698.63	652.36	18.23	391.09	321.86	364.02	507.96

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	197.9	25.00	581.01	619.56	700.71	662.73	18.40	398.02	324.90	367.46	516.34
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	200.7	25.00	590.43	621.39	702.78	673.10	18.57	405.02	327.94	370.89	524.77
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	203.6	25.00	599.86	623.23	704.85	683.46	18.74	412.09	330.98	374.33	533.25
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	206.4	25.00	609.28	625.06	706.93	693.83	18.92	419.22	334.02	377.77	541.78
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	209.2	25.00	618.71	626.89	709.00	704.20	19.09	426.42	337.06	381.21	550.36
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	212.1	25.00	628.13	628.73	711.07	714.56	19.26	433.68	340.10	384.64	559.00
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	214.9	25.00	637.56	630.56	713.14	724.93	19.43	441.00	343.14	388.08	567.69
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	217.7	25.00	646.98	632.39	715.22	735.30	19.60	448.39	346.18	391.52	576.43
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	220.5	25.00	656.41	634.22	717.29	745.67	19.78	455.85	349.22	394.96	585.22
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	223.4	25.00	665.83	636.06	719.36	756.03	19.95	463.37	352.26	398.39	594.06
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	226.2	25.00	675.26	637.89	721.44	766.40	20.12	470.95	355.30	401.83	602.96
10.1	8.1	5	0.50	0.50	0.40	19.00	3.57	229.0	25.00	684.68	639.72	723.51	776.77	20.29	478.60	358.34	405.27	611.91
10.2	8.2	5	0.50	0.50	0.40	19.00	3.57	231.8	25.00	694.11	641.56	725.58	787.14	20.46	486.32	361.37	408.71	620.90
10.3	8.3	5	0.50	0.50	0.40	19.00	3.57	234.7	25.00	703.53	643.39	727.66	797.50	20.64	494.10	364.41	412.14	629.96
10.4	8.4	5	0.50	0.50	0.40	19.00	3.57	237.5	25.00	712.96	645.22	729.73	807.87	20.81	501.94	367.45	415.58	639.06
10.5	8.5	5	0.50	0.50	0.40	19.00	3.57	240.3	25.00	722.38	647.06	731.80	818.24	20.98	509.85	370.49	419.02	648.21
10.6	8.6	5	0.50	0.50	0.40	19.00	3.57	243.2	25.00	731.81	648.89	733.88	828.60	21.15	517.83	373.53	422.45	657.42
10.7	8.7	5	0.50	0.50	0.40	19.00	3.57	246.0	25.00	741.23	650.72	735.95	838.97	21.33	525.87	376.57	425.89	666.68
10.8	8.8	5	0.50	0.50	0.40	19.00	3.57	248.8	25.00	750.66	652.55	738.02	849.34	21.50	533.97	379.61	429.33	675.99
10.9	8.9	5	0.50	0.50	0.40	19.00	3.57	251.6	25.00	760.08	654.39	740.09	859.71	21.67	542.14	382.65	432.77	685.35
11.0	9.0	5	0.50	0.50	0.40	19.00	3.57	254.5	25.00	769.51	656.22	742.17	870.07	21.84	550.38	385.69	436.20	694.77
11.1	9.1	6	0.70	0.50	0.86	37.70	45.38	257.3	46.91	787.19	4949.67	5597.95	887.05	46.91	568.06	4949.67	5597.95	711.74
11.2	9.2	6	0.70	0.50	0.86	37.70	45.38	260.1	47.32	805.03	4992.96	5646.91	904.15	47.32	585.90	4992.96	5646.91	728.84
11.3	9.3	6	0.70	0.50	0.86	37.70	45.38	263.0	47.73	823.02	5036.25	5695.87	921.37	47.73	603.89	5036.25	5695.87	746.07
11.4	9.4	6	0.70	0.50	0.86	37.70	45.38	265.8	48.14	841.17	5079.55	5744.83	938.72	48.14	622.04	5079.55	5744.83	763.41
11.5	9.5	6	0.70	0.50	0.86	37.70	45.38	268.6	48.55	859.47	5122.84	5793.79	956.19	48.55	640.34	5122.84	5793.79	780.88
11.6	9.6	6	0.70	0.50	0.86	37.70	45.38	271.4	48.96	877.93	5166.13	5842.75	973.78	48.96	658.80	5166.13	5842.75	798.47
11.7	9.7	7	0.70	0.50	0.79	35.40	35.91	274.3	45.49	895.08	4122.44	4662.37	990.33	45.49	675.95	4122.44	4662.37	815.02
11.8	9.8	7	0.70	0.50	0.79	35.40	35.90	277.1	45.87	912.38	4155.08	4699.29	1006.99	45.87	693.25	4155.08	4699.29	831.69
11.9	9.9	8	0.70	0.50	0.86	37.70	45.33	279.9	50.19	931.30	5290.13	5983.00	1024.95	50.19	712.17	5290.13	5983.00	849.65
12.0	10.0	8	0.70	0.50	0.86	37.70	45.31	282.7	50.60	950.37	5331.38	6029.65	1043.04	50.60	731.24	5331.38	6029.65	867.74
12.1	10.1	8	0.70	0.50	0.86	37.70	45.29	285.6	51.01	969.61	5372.59	6076.25	1061.26	51.01	750.47	5372.59	6076.25	885.95
12.2	10.2	8	0.70	0.50	0.86	37.70	45.28	288.4	51.42	988.99	5413.75	6122.81	1079.59	51.42	769.86	5413.75	6122.81	904.29
12.3	10.3	8	0.70	0.50	0.86	37.70	45.26	291.2	51.83	1008.53	5454.88	6169.32	1098.05	51.83	789.40	5454.88	6169.32	922.75
12.4	10.4	8	0.70	0.50	0.86	37.70	45.24	294.1	52.24	1028.23	5495.95	6215.78	1116.63	52.24	809.10	5495.95	6215.78	941.33
12.5	10.5	8	0.70	0.50	0.86	37.70	45.23	296.9	52.65	1048.08	5536.99	6262.19	1135.34	52.65	828.95	5536.99	6262.19	960.04
12.6	10.6	8	0.70	0.50	0.86	37.70	45.21	299.7	53.06	1068.08	5577.98	6308.55	1154.17	53.06	848.95	5577.98	6308.55	978.87
12.7	10.7	8	0.70	0.50	0.86	37.70	45.19	302.5	53.47	1088.24	5618.92	6354.85	1173.13	53.47	869.11	5618.92	6354.85	997.82
12.8	10.8	8	0.70	0.50	0.86	37.70	45.17	305.4	53.88	1108.55	5659.83	6401.11	1192.21	53.88	889.42	5659.83	6401.11	1016.90
12.9	10.9	8	0.70	0.50	0.86	37.70	45.16	308.2	54.29	1129.02	5700.68	6447.32	1211.41	54.29	909.89	5700.68	6447.32	1036.10
13.0	11.0	8	0.70	0.50	0.86	37.70	45.14	311.0	54.70	1149.65	5741.50	6493.48	1230.73	54.70	930.52	5741.50	6493.48	1055.43
13.1	11.1	8	0.70	0.50	0.86	37.70	45.12	313.8	55.11	1170.42	5782.26	6539.59	1250.18	55.11	951.29	5782.26	6539.59	1074.88
13.2	11.2	8	0.70	0.50	0.86	37.70	45.10	316.7	55.53	1191.36	5822.99	6585.64	1269.76	55.53	972.23	5822.99	6585.64	1094.45
13.3	11.3	8	0.70	0.50	0.86	37.70	45.08	319.5	55.94	1212.44	5863.66	6631.64	1289.45	55.94	993.31	5863.66	6631.64	1114.15
13.4	11.4	8	0.70	0.50	0.86	37.70	45.07	322.3	56.35	1233.68	5904.29	6677.60	1309.28	56.35	1014.55	5904.29	6677.60	1133.97
13.5	11.5	8	0.70	0.50	0.86	37.70	45.05	325.2	56.76	1255.08	5944.87	6723.49	1329.22	56.76	1035.95	5944.87	6723.49	1153.92
13.6	11.6	8	0.70	0.50	0.86	37.70	45.03	328.0	57.17	1276.63	5985.41	6769.34	1349.29	57.17	1057.50	5985.41	6769.34	1173.98

13.7	11.7	8	0.70	0.50	0.86	37.70	45.01	330.8	57.58	1298.34	6025.90	6815.13	1369.48	57.58	1079.21	6025.90	6815.13	1194.18
13.8	11.8	8	0.70	0.50	0.86	37.70	44.99	333.6	57.99	1320.20	6066.34	6860.87	1389.80	57.99	1101.07	6066.34	6860.87	1214.49
13.9	11.9	8	0.70	0.50	0.86	37.70	44.97	336.5	58.40	1342.21	6106.74	6906.56	1410.24	58.40	1123.08	6106.74	6906.56	1234.93
14.0	12.0	8	0.70	0.50	0.86	37.70	44.95	339.3	58.81	1364.38	6147.09	6952.19	1430.80	58.81	1145.25	6147.09	6952.19	1255.50
14.1	12.1	8	0.70	0.50	0.86	37.70	44.94	342.1	59.22	1386.71	6187.39	6997.77	1451.49	59.22	1167.58	6187.39	6997.77	1276.18
14.2	12.2	8	0.70	0.50	0.86	37.70	44.92	344.9	59.63	1409.19	6227.64	7043.29	1472.30	59.63	1190.06	6227.64	7043.29	1296.99
14.3	12.3	8	0.70	0.50	0.86	37.70	44.90	347.8	60.04	1431.82	6267.84	7088.76	1493.23	60.04	1212.69	6267.84	7088.76	1317.93
14.4	12.4	8	0.70	0.50	0.86	37.70	44.88	350.6	60.45	1454.61	6307.99	7134.17	1514.29	60.45	1235.48	6307.99	7134.17	1338.99
14.5	12.5	8	0.70	0.50	0.86	37.70	44.86	353.4	60.86	1477.55	6348.10	7179.53	1535.47	60.86	1258.42	6348.10	7179.53	1360.17
14.6	12.6	8	0.70	0.50	0.86	37.70	44.84	356.3	61.27	1500.65	6388.15	7224.83	1556.78	61.27	1281.52	6388.15	7224.83	1381.47
14.7	12.7	8	0.70	0.50	0.86	37.70	44.82	359.1	61.68	1523.90	6428.16	7270.08	1578.21	61.68	1304.77	6428.16	7270.08	1402.90
14.8	12.8	9	0.70	0.50	0.79	35.40	35.45	361.9	57.21	1545.47	5117.48	5787.73	1598.29	57.21	1326.34	5117.48	5787.73	1422.99
14.9	12.9	9	0.70	0.50	0.79	35.40	35.43	364.7	57.59	1567.19	5148.96	5823.33	1618.49	57.59	1348.05	5148.96	5823.33	1443.18
15.0	13.0	10	0.70	0.50	0.90	38.85	50.06	367.6	65.51	1591.88	7322.58	8281.65	1641.07	65.51	1372.75	7322.58	8281.65	1465.77
15.1	13.1	10	0.70	0.50	0.90	38.85	50.04	370.4	65.94	1616.74	7367.16	8332.06	1663.79	65.94	1397.61	7367.16	8332.06	1488.48
15.2	13.2	10	0.70	0.50	0.90	38.85	50.02	373.2	66.36	1641.76	7411.68	8382.42	1686.63	66.36	1422.63	7411.68	8382.42	1511.32
15.3	13.3	10	0.70	0.50	0.90	38.85	49.99	376.0	66.79	1666.94	7456.15	8432.71	1709.60	66.79	1447.81	7456.15	8432.71	1534.29
15.4	13.4	10	0.70	0.50	0.90	38.85	49.97	378.9	67.22	1692.28	7500.56	8482.93	1732.70	67.22	1473.15	7500.56	8482.93	1557.39
15.5	13.5	10	0.70	0.50	0.90	38.85	49.95	381.7	67.65	1717.78	7544.91	8533.09	1755.93	67.65	1498.65	7544.91	8533.09	1580.62
15.6	13.6	10	0.70	0.50	0.90	38.85	49.93	384.5	68.07	1743.44	7589.20	8583.18	1779.29	68.07	1524.31	7589.20	8583.18	1603.98
15.7	13.7	10	0.70	0.50	0.90	38.85	49.91	387.4	68.50	1769.27	7633.43	8633.21	1802.77	68.50	1550.14	7633.43	8633.21	1627.47
15.8	13.8	10	0.70	0.50	0.90	38.85	49.88	390.2	68.93	1795.25	7677.61	8683.17	1826.39	68.93	1576.12	7677.61	8683.17	1651.08
15.9	13.9	10	0.70	0.50	0.90	38.85	49.86	393.0	69.35	1821.40	7721.73	8733.07	1850.13	69.35	1602.27	7721.73	8733.07	1674.83
16.0	14.0	10	0.70	0.50	0.90	38.85	49.84	395.8	69.78	1847.71	7765.79	8782.90	1874.01	69.78	1628.58	7765.79	8782.90	1698.70
16.1	14.1	10	0.70	0.50	0.90	38.85	49.82	398.7	70.21	1874.17	7809.79	8832.66	1898.01	70.21	1655.04	7809.79	8832.66	1722.70
16.2	14.2	10	0.70	0.50	0.90	38.85	49.79	401.5	70.64	1900.80	7853.73	8882.35	1922.14	70.64	1681.67	7853.73	8882.35	1746.83
16.3	14.3	10	0.70	0.50	0.90	38.85	49.77	404.3	71.06	1927.59	7897.60	8931.98	1946.40	71.06	1708.46	7897.60	8931.98	1771.09
16.4	14.4	10	0.70	0.50	0.90	38.85	49.75	407.2	71.49	1954.55	7941.42	8981.54	1970.79	71.49	1735.41	7941.42	8981.54	1795.48
16.5	14.5	10	0.70	0.50	0.90	38.85	49.72	410.0	71.92	1981.66	7985.18	9031.03	1995.30	71.92	1762.53	7985.18	9031.03	1820.00
16.6	14.6	10	0.70	0.50	0.90	38.85	49.70	412.8	72.35	2008.93	8028.88	9080.45	2019.95	72.35	1789.80	8028.88	9080.45	1844.65
16.7	14.7	10	0.70	0.50	0.90	38.85	49.68	415.6	72.77	2036.37	8072.52	9129.80	2044.73	72.77	1817.24	8072.52	9129.80	1869.42
16.8	14.8	10	0.70	0.50	0.90	38.85	49.65	418.5	73.20	2063.96	8116.09	9179.08	2069.63	73.20	1844.83	8116.09	9179.08	1894.33
16.9	14.9	11	0.70	0.50	0.79	35.40	35.09	421.3	65.15	2088.52	5769.58	6525.24	2092.11	65.15	1869.39	5769.58	6525.24	1916.80
17.0	15.0	11	0.70	0.50	0.79	35.40	35.08	424.1	65.53	2113.23	5800.15	6559.82	2114.70	65.53	1894.10	5800.15	6559.82	1939.39

1.2.2.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1703	1557

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.0	10.43	3.28	732.75	575.50	4.58	10.43	3.28	732.75	575.50	4.58
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	3.9	10.76	6.66	756.18	593.90	9.25	10.76	6.66	756.18	593.90	9.25
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	5.9	11.10	10.14	779.60	612.30	14.01	11.10	10.14	779.60	612.30	14.01
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	7.9	11.43	13.73	803.02	630.69	18.84	11.43	13.73	803.02	630.69	18.84
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	9.8	11.76	17.43	826.45	649.09	23.76	11.76	17.43	826.45	649.09	23.76
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	11.8	12.10	21.23	849.87	667.49	28.76	12.10	21.23	849.87	667.49	28.76
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	13.7	12.43	25.13	873.29	685.88	33.85	12.43	25.13	873.29	685.88	33.85
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	15.7	12.76	29.14	896.72	704.28	39.02	12.76	29.14	896.72	704.28	39.02
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	17.7	13.10	33.26	920.14	722.68	44.28	13.10	33.26	920.14	722.68	44.28
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	19.6	23.20	40.55	417.95	328.26	52.07	7.74	35.69	136.72	107.38	48.19
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	21.6	23.20	47.84	419.78	329.70	59.87	7.91	38.18	139.76	109.77	52.14
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	23.6	23.20	55.12	421.61	331.13	67.66	8.09	40.72	142.80	112.16	56.14
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	25.5	23.20	62.41	423.45	332.57	75.46	8.26	43.31	145.84	114.54	60.18
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	27.5	23.20	69.70	425.28	334.01	83.25	8.43	45.96	148.88	116.93	64.26
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	29.5	23.20	76.99	427.11	335.45	91.04	8.60	48.66	151.92	119.32	68.38
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	31.4	23.20	84.28	428.95	336.89	98.84	8.78	51.42	154.96	121.71	72.55
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	33.4	23.20	91.57	430.78	338.33	106.63	8.95	54.23	158.00	124.09	76.76
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	35.3	23.20	98.85	432.61	339.77	114.43	9.12	57.10	161.04	126.48	81.02
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	37.3	23.20	106.14	434.45	341.21	122.22	9.29	60.02	164.08	128.87	85.32
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	39.3	23.20	113.43	436.28	342.65	130.02	9.46	62.99	167.12	131.25	89.66
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	41.2	23.20	120.72	438.11	344.09	137.81	9.64	66.02	170.16	133.64	94.05
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	43.2	23.20	128.01	439.94	345.53	145.60	9.81	69.10	173.20	136.03	98.47

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	135.30	441.78	346.97	153.40	9.98	72.23	176.24	138.42	102.95
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	47.1	18.36	141.07	1409.84	1107.28	159.98	18.36	78.00	1409.84	1107.28	109.52
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	49.1	18.71	146.94	1436.55	1128.26	166.64	18.71	83.88	1436.55	1128.26	116.19
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	51.1	19.06	152.93	1463.25	1149.24	173.39	19.06	89.87	1463.25	1149.24	122.94
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	53.0	19.40	159.03	1489.96	1170.21	180.23	19.40	95.96	1489.96	1170.21	129.78
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	55.0	19.75	165.23	1516.67	1191.19	187.16	19.75	102.17	1516.67	1191.19	136.71
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	56.9	20.10	171.55	1543.38	1212.17	194.18	20.10	108.48	1543.38	1212.17	143.73
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	58.9	20.45	177.97	1570.09	1233.14	201.28	20.45	114.91	1570.09	1233.14	150.83
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	60.9	20.80	184.50	1596.80	1254.12	208.47	20.80	121.44	1596.80	1254.12	158.02
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	62.8	21.14	191.14	1623.51	1275.10	215.75	21.14	128.08	1623.51	1275.10	165.30
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	64.8	21.49	197.90	1650.21	1296.08	223.11	21.49	134.83	1650.21	1296.08	172.66
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	66.8	21.84	204.76	1676.92	1317.05	230.56	21.84	141.69	1676.92	1317.05	180.11
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	68.7	22.19	211.73	1703.63	1338.03	238.10	22.19	148.66	1703.63	1338.03	187.65
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	70.7	22.53	218.81	1730.34	1359.01	245.73	22.53	155.74	1730.34	1359.01	195.28
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	72.6	22.88	226.00	1757.05	1379.98	253.45	22.88	162.93	1757.05	1379.98	203.00
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	74.6	23.23	233.29	1783.76	1400.96	261.25	23.23	170.23	1783.76	1400.96	210.80
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	76.6	23.58	240.70	1810.46	1421.94	269.14	23.58	177.64	1810.46	1421.94	218.69
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	78.5	25.00	248.56	564.57	443.41	277.38	13.24	181.80	233.73	183.57	223.98
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	80.5	25.00	256.41	566.40	444.85	285.63	13.41	186.01	236.76	185.95	229.31
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	82.5	25.00	264.26	568.24	446.29	293.88	13.58	190.27	239.80	188.34	234.69
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	84.4	25.00	272.12	570.07	447.73	302.12	13.75	194.59	242.84	190.73	240.11
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	86.4	25.00	279.97	571.90	449.17	310.37	13.92	198.97	245.88	193.12	245.57
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	88.4	25.00	287.83	573.74	450.61	318.62	14.10	203.40	248.92	195.50	251.08
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	90.3	25.00	295.68	575.57	452.05	326.86	14.27	207.88	251.96	197.89	256.63
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	92.3	25.00	303.53	577.40	453.49	335.11	14.44	212.42	255.00	200.28	262.22
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	94.2	25.00	311.39	579.23	454.93	343.36	14.61	217.01	258.04	202.66	267.85
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	96.2	25.00	319.24	581.07	456.37	351.60	14.78	221.65	261.08	205.05	273.53
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	98.2	25.00	327.10	582.90	457.81	359.85	14.96	226.35	264.12	207.44	279.26
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	100.1	25.00	334.95	584.73	459.25	368.10	15.13	231.10	267.16	209.82	285.02
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	102.1	25.00	342.80	586.57	460.69	376.34	15.30	235.91	270.20	212.21	290.83
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	104.1	25.00	350.66	588.40	462.13	384.59	15.47	240.77	273.24	214.60	296.68
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	106.0	25.00	358.51	590.23	463.57	392.84	15.65	245.69	276.27	216.99	302.58
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	108.0	25.00	366.37	592.07	465.01	401.08	15.82	250.66	279.31	219.37	308.52
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	110.0	25.00	374.22	593.90	466.45	409.33	15.99	255.68	282.35	221.76	314.50
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	111.9	25.00	382.07	595.73	467.89	417.58	16.16	260.76	285.39	224.15	320.53
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	113.9	25.00	389.93	597.56	469.33	425.82	16.33	265.89	288.43	226.53	326.59
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	115.8	25.00	397.78	599.40	470.77	434.07	16.51	271.07	291.47	228.92	332.71
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	117.8	25.00	405.64	601.23	472.20	442.32	16.68	276.31	294.51	231.31	338.86
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	119.8	25.00	413.49	603.06	473.64	450.56	16.85	281.61	297.55	233.70	345.06
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	121.7	25.00	421.34	604.90	475.08	458.81	17.02	286.96	300.59	236.08	351.30
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	123.7	25.00	429.20	606.73	476.52	467.06	17.19	292.36	303.63	238.47	357.59
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	125.7	25.00	437.05	608.56	477.96	475.30	17.37	297.81	306.67	240.86	363.91
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	127.6	25.00	444.91	610.40	479.40	483.55	17.54	303.32	309.71	243.24	370.29
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	129.6	25.00	452.76	612.23	480.84	491.80	17.71	308.89	312.75	245.63	376.70
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	131.6	25.00	460.61	614.06	482.28	500.04	17.88	314.51	315.79	248.02	383.16
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	133.5	25.00	468.47	615.89	483.72	508.29	18.06	320.18	318.82	250.40	389.66
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	135.5	25.00	476.32	617.73	485.16	516.54	18.23	325.90	321.86	252.79	396.20

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	137.4	25.00	484.18	619.56	486.60	524.78	18.40	331.68	324.90	255.18	402.79
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	139.4	25.00	492.03	621.39	488.04	533.03	18.57	337.52	327.94	257.57	409.42
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	499.88	623.23	489.48	541.28	18.74	343.41	330.98	259.95	416.10
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	143.3	25.00	507.74	625.06	490.92	549.52	18.92	349.35	334.02	262.34	422.82
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	145.3	25.00	515.59	626.89	492.36	557.77	19.09	355.35	337.06	264.73	429.58
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	147.3	25.00	523.44	628.73	493.80	566.02	19.26	361.40	340.10	267.11	436.38
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	149.2	25.00	531.30	630.56	495.24	574.26	19.43	367.50	343.14	269.50	443.23
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	151.2	25.00	539.15	632.39	496.68	582.51	19.60	373.66	346.18	271.89	450.12
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	153.2	25.00	547.01	634.22	498.12	590.76	19.78	379.87	349.22	274.27	457.05
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	155.1	25.00	554.86	636.06	499.56	599.00	19.95	386.14	352.26	276.66	464.03
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	157.1	25.00	562.71	637.89	501.00	607.25	20.12	392.46	355.30	279.05	471.05
10.1	8.1	5	0.50	0.50	0.40	19.00	3.56	159.0	25.00	570.57	639.72	502.44	615.50	20.29	398.84	358.09	281.24	478.11
10.2	8.2	5	0.50	0.50	0.40	19.00	3.56	161.0	25.00	578.42	641.56	503.88	623.74	20.46	405.27	360.88	283.44	485.22
10.3	8.3	5	0.50	0.50	0.40	19.00	3.56	163.0	25.00	586.28	643.39	505.32	631.99	20.64	411.75	363.67	285.62	492.37
10.4	8.4	5	0.50	0.50	0.40	19.00	3.56	164.9	25.00	594.13	645.22	506.76	640.24	20.81	418.29	366.45	287.81	499.56
10.5	8.5	5	0.50	0.50	0.40	19.00	3.56	166.9	25.00	601.98	647.06	508.20	648.48	20.98	424.88	369.22	289.99	506.80
10.6	8.6	5	0.50	0.50	0.40	19.00	3.55	168.9	25.00	609.84	648.89	509.64	656.73	21.15	431.52	371.99	292.16	514.08
10.7	8.7	5	0.50	0.50	0.40	19.00	3.55	170.8	25.00	617.69	650.72	511.08	664.98	21.33	438.22	374.76	294.33	521.40
10.8	8.8	5	0.50	0.50	0.40	19.00	3.55	172.8	25.00	625.55	652.55	512.51	673.23	21.50	444.98	377.52	296.50	528.77
10.9	8.9	5	0.50	0.50	0.40	19.00	3.55	174.8	25.00	633.40	654.39	513.95	681.47	21.67	451.78	380.27	298.67	536.18
11.0	9.0	5	0.50	0.50	0.40	19.00	3.54	176.7	25.00	641.25	656.22	515.39	689.72	21.84	458.65	383.02	300.83	543.63
11.1	9.1	6	0.70	0.50	0.86	37.70	45.15	178.7	46.91	655.99	4924.89	3868.00	703.47	46.91	473.38	4924.89	3868.00	557.38
11.2	9.2	6	0.70	0.50	0.86	37.70	45.13	180.6	47.32	670.86	4965.61	3899.98	717.33	47.32	488.25	4965.61	3899.98	571.24
11.3	9.3	6	0.70	0.50	0.86	37.70	45.11	182.6	47.73	685.85	5006.27	3931.92	731.29	47.73	503.24	5006.27	3931.92	585.20
11.4	9.4	6	0.70	0.50	0.86	37.70	45.09	184.6	48.14	700.98	5046.88	3963.81	745.35	48.14	518.37	5046.88	3963.81	599.26
11.5	9.5	6	0.70	0.50	0.86	37.70	45.07	186.5	48.55	716.23	5087.44	3995.66	759.51	48.55	533.62	5087.44	3995.66	613.43
11.6	9.6	6	0.70	0.50	0.86	37.70	45.04	188.5	48.96	731.61	5127.93	4027.47	773.78	48.96	549.00	5127.93	4027.47	627.70
11.7	9.7	7	0.70	0.50	0.79	35.40	35.63	190.5	45.49	745.90	4090.01	3212.28	787.18	45.49	563.29	4090.01	3212.28	641.09
11.8	9.8	7	0.70	0.50	0.79	35.40	35.61	192.4	45.87	760.31	4121.88	3237.31	800.67	45.87	577.70	4121.88	3237.31	654.59
11.9	9.9	8	0.70	0.50	0.86	37.70	44.98	194.4	50.19	776.08	5249.08	4122.62	815.25	50.19	593.47	5249.08	4122.62	669.16
12.0	10.0	8	0.70	0.50	0.86	37.70	44.95	196.3	50.60	791.98	5289.35	4154.25	829.93	50.60	609.37	5289.35	4154.25	683.85
12.1	10.1	8	0.70	0.50	0.86	37.70	44.93	198.3	51.01	808.00	5329.57	4185.83	844.72	51.01	625.40	5329.57	4185.83	698.63
12.2	10.2	8	0.70	0.50	0.86	37.70	44.91	200.3	51.42	824.16	5369.72	4217.37	859.60	51.42	641.55	5369.72	4217.37	713.52
12.3	10.3	8	0.70	0.50	0.86	37.70	44.89	202.2	51.83	840.44	5409.81	4248.86	874.59	51.83	657.83	5409.81	4248.86	728.51
12.4	10.4	8	0.70	0.50	0.86	37.70	44.86	204.2	52.24	856.86	5449.85	4280.30	889.69	52.24	674.25	5449.85	4280.30	743.60
12.5	10.5	8	0.70	0.50	0.86	37.70	44.84	206.2	52.65	873.40	5489.82	4311.69	904.88	52.65	690.79	5489.82	4311.69	758.80
12.6	10.6	8	0.70	0.50	0.86	37.70	44.82	208.1	53.06	890.07	5529.74	4343.04	920.18	53.06	707.46	5529.74	4343.04	774.10
12.7	10.7	8	0.70	0.50	0.86	37.70	44.79	210.1	53.47	906.87	5569.59	4374.35	935.59	53.47	724.26	5569.59	4374.35	789.50
12.8	10.8	8	0.70	0.50	0.86	37.70	44.77	212.1	53.88	923.79	5609.38	4405.60	951.09	53.88	741.19	5609.38	4405.60	805.01
12.9	10.9	8	0.70	0.50	0.86	37.70	44.75	214.0	54.29	940.85	5649.11	4436.80	966.70	54.29	758.24	5649.11	4436.80	820.62
13.0	11.0	8	0.70	0.50	0.86	37.70	44.72	216.0	54.70	958.04	5688.78	4467.96	982.41	54.70	775.43	5688.78	4467.96	836.33
13.1	11.1	8	0.70	0.50	0.86	37.70	44.70	217.9	55.11	975.35	5728.39	4499.07	998.23	55.11	792.74	5728.39	4499.07	852.14
13.2	11.2	8	0.70	0.50	0.86	37.70	44.68	219.9	55.53	992.80	5767.94	4530.13	1014.15	55.53	810.19	5767.94	4530.13	868.06
13.3	11.3	8	0.70	0.50	0.86	37.70	44.65	221.9	55.94	1010.37	5807.42	4561.14	1030.17	55.94	827.76	5807.42	4561.14	884.08
13.4	11.4	8	0.70	0.50	0.86	37.70	44.63	223.8	56.35	1028.07	5846.84	4592.10	1046.30	56.35	845.46	5846.84	4592.10	900.21
13.5	11.5	8	0.70	0.50	0.86	37.70	44.60	225.8	56.76	1045.90	5886.19	4623.01	1062.52	56.76	863.29	5886.19	4623.01	916.44
13.6	11.6	8	0.70	0.50	0.86	37.70	44.58	227.8	57.17	1063.86	5925.48	4653.86	1078.85	57.17	881.25	5925.48	4653.86	932.77

13.7	11.7	8	0.70	0.50	0.86	37.70	44.55	229.7	57.58	1081.95	5964.71	4684.67	1095.29	57.58	899.34	5964.71	4684.67	949.20
13.8	11.8	8	0.70	0.50	0.86	37.70	44.53	231.7	57.99	1100.17	6003.87	4715.43	1111.83	57.99	917.56	6003.87	4715.43	965.74
13.9	11.9	8	0.70	0.50	0.86	37.70	44.50	233.7	58.40	1118.51	6042.97	4746.13	1128.47	58.40	935.90	6042.97	4746.13	982.38
14.0	12.0	8	0.70	0.50	0.86	37.70	44.48	235.6	58.81	1136.99	6082.00	4776.79	1145.21	58.81	954.38	6082.00	4776.79	999.12
14.1	12.1	8	0.70	0.50	0.86	37.70	44.45	237.6	59.22	1155.59	6120.96	4807.39	1162.06	59.22	972.98	6120.96	4807.39	1015.97
14.2	12.2	8	0.70	0.50	0.86	37.70	44.43	239.5	59.63	1174.32	6159.86	4837.94	1179.01	59.63	991.71	6159.86	4837.94	1032.92
14.3	12.3	8	0.70	0.50	0.86	37.70	44.40	241.5	60.04	1193.18	6198.68	4868.44	1196.06	60.04	1010.58	6198.68	4868.44	1049.97
14.4	12.4	8	0.70	0.50	0.86	37.70	44.38	243.5	60.45	1212.18	6237.45	4898.88	1213.21	60.45	1029.57	6237.45	4898.88	1067.13
14.5	12.5	8	0.70	0.50	0.86	37.70	44.35	245.4	60.86	1231.29	6276.14	4929.27	1230.47	60.86	1048.69	6276.14	4929.27	1084.39
14.6	12.6	8	0.70	0.50	0.86	37.70	44.33	247.4	61.27	1250.54	6314.76	4959.60	1247.83	61.27	1067.93	6314.76	4959.60	1101.75
14.7	12.7	8	0.70	0.50	0.86	37.70	44.30	249.4	61.68	1269.92	6353.32	4989.89	1265.30	61.68	1087.31	6353.32	4989.89	1119.21
14.8	12.8	9	0.70	0.50	0.79	35.40	35.01	251.3	57.21	1287.89	5054.73	3969.98	1281.64	57.21	1105.29	5054.73	3969.98	1135.56
14.9	12.9	9	0.70	0.50	0.79	35.40	34.99	253.3	57.59	1305.99	5085.00	3993.75	1298.08	57.59	1123.38	5085.00	3993.75	1151.99
15.0	13.0	10	0.70	0.50	0.90	38.85	49.46	255.3	65.51	1326.57	7235.54	5682.78	1316.51	65.51	1143.96	7235.54	5682.78	1170.42
15.1	13.1	10	0.70	0.50	0.90	38.85	49.43	257.2	65.94	1347.28	7278.43	5716.46	1335.04	65.94	1164.67	7278.43	5716.46	1188.96
15.2	13.2	10	0.70	0.50	0.90	38.85	49.41	259.2	66.36	1368.13	7321.24	5750.09	1353.69	66.36	1185.52	7321.24	5750.09	1207.60
15.3	13.3	10	0.70	0.50	0.90	38.85	49.38	261.1	66.79	1389.11	7363.97	5783.65	1372.44	66.79	1206.51	7363.97	5783.65	1226.35
15.4	13.4	10	0.70	0.50	0.90	38.85	49.35	263.1	67.22	1410.23	7406.62	5817.15	1391.29	67.22	1227.62	7406.62	5817.15	1245.21
15.5	13.5	10	0.70	0.50	0.90	38.85	49.32	265.1	67.65	1431.48	7449.19	5850.58	1410.26	67.65	1248.88	7449.19	5850.58	1264.17
15.6	13.6	10	0.70	0.50	0.90	38.85	49.29	267.0	68.07	1452.87	7491.69	5883.96	1429.33	68.07	1270.26	7491.69	5883.96	1283.24
15.7	13.7	10	0.70	0.50	0.90	38.85	49.26	269.0	68.50	1474.39	7534.10	5917.27	1448.51	68.50	1291.78	7534.10	5917.27	1302.42
15.8	13.8	10	0.70	0.50	0.90	38.85	49.23	271.0	68.93	1496.04	7576.42	5950.51	1467.80	68.93	1313.44	7576.42	5950.51	1321.71
15.9	13.9	10	0.70	0.50	0.90	38.85	49.20	272.9	69.35	1517.83	7618.67	5983.69	1487.19	69.35	1335.22	7618.67	5983.69	1341.10
16.0	14.0	10	0.70	0.50	0.90	38.85	49.16	274.9	69.78	1539.75	7660.84	6016.81	1506.69	69.78	1357.15	7660.84	6016.81	1360.61
16.1	14.1	10	0.70	0.50	0.90	38.85	49.13	276.9	70.21	1561.81	7702.92	6049.86	1526.30	70.21	1379.20	7702.92	6049.86	1380.22
16.2	14.2	10	0.70	0.50	0.90	38.85	49.10	278.8	70.64	1584.00	7744.91	6082.84	1546.02	70.64	1401.39	7744.91	6082.84	1399.93
16.3	14.3	10	0.70	0.50	0.90	38.85	49.07	280.8	71.06	1606.33	7786.83	6115.76	1565.84	71.06	1423.72	7786.83	6115.76	1419.76
16.4	14.4	10	0.70	0.50	0.90	38.85	49.04	282.7	71.49	1628.79	7828.65	6148.61	1585.77	71.49	1446.18	7828.65	6148.61	1439.69
16.5	14.5	10	0.70	0.50	0.90	38.85	49.01	284.7	71.92	1651.38	7870.40	6181.39	1605.81	71.92	1468.77	7870.40	6181.39	1459.73
16.6	14.6	10	0.70	0.50	0.90	38.85	48.98	286.7	72.35	1674.11	7912.05	6214.11	1625.96	72.35	1491.50	7912.05	6214.11	1479.87
16.7	14.7	10	0.70	0.50	0.90	38.85	48.95	288.6	72.77	1696.97	7953.62	6246.76	1646.21	72.77	1514.36	7953.62	6246.76	1500.12
16.8	14.8	10	0.70	0.50	0.90	38.85	48.91	290.6	73.20	1719.97	7995.11	6279.34	1666.57	73.20	1537.36	7995.11	6279.34	1520.48
16.9	14.9	11	0.70	0.50	0.79	35.40	34.54	292.6	65.15	1740.44	5677.97	4459.46	1684.91	65.15	1557.83	5677.97	4459.46	1538.82
17.0	15.0	11	0.70	0.50	0.79	35.40	34.51	294.5	65.53	1761.02	5706.97	4482.24	1703.34	65.53	1578.42	5706.97	4482.24	1557.26

1.2.2.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO
Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1316	1199

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	1.3	10.43	2.62	732.75	368.32	3.35	10.43	2.62	732.75	368.32	3.35
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	2.5	10.76	5.33	756.18	380.10	6.77	10.76	5.33	756.18	380.10	6.77
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	3.8	11.10	8.11	779.60	391.87	10.26	11.10	8.11	779.60	391.87	10.26
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	5.0	11.43	10.99	803.02	403.64	13.82	11.43	10.99	803.02	403.64	13.82
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	6.3	11.76	13.94	826.45	415.42	17.44	11.76	13.94	826.45	415.42	17.44
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	7.5	12.10	16.98	849.87	427.19	21.13	12.10	16.98	849.87	427.19	21.13
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	8.8	12.43	20.11	873.29	438.97	24.88	12.43	20.11	873.29	438.97	24.88
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	10.1	12.76	23.31	896.72	450.74	28.71	12.76	23.31	896.72	450.74	28.71
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	11.3	13.10	26.61	920.14	462.51	32.59	13.10	26.61	920.14	462.51	32.59
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	12.6	23.20	32.44	417.95	210.08	38.52	7.74	28.55	136.72	68.73	35.41
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	13.8	23.20	38.27	419.78	211.00	44.44	7.91	30.54	139.76	70.25	38.26
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	15.1	23.20	44.10	421.61	211.93	50.36	8.09	32.57	142.80	71.78	41.14
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	16.3	23.20	49.93	423.45	212.85	56.28	8.26	34.65	145.84	73.31	44.06
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	17.6	23.20	55.76	425.28	213.77	62.20	8.43	36.77	148.88	74.84	47.01
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	18.8	23.20	61.59	427.11	214.69	68.12	8.60	38.93	151.92	76.36	49.99
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	20.1	23.20	67.42	428.95	215.61	74.04	8.78	41.14	154.96	77.89	53.02
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	21.4	23.20	73.25	430.78	216.53	79.97	8.95	43.39	158.00	79.42	56.07
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	22.6	23.20	79.08	432.61	217.45	85.89	9.12	45.68	161.04	80.95	59.16
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	23.9	23.20	84.91	434.45	218.38	91.81	9.29	48.01	164.08	82.47	62.29
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	25.1	23.20	90.75	436.28	219.30	97.73	9.46	50.39	167.12	84.00	65.45
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	26.4	23.20	96.58	438.11	220.22	103.65	9.64	52.81	170.16	85.53	68.64
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	27.6	23.20	102.41	439.94	221.14	109.57	9.81	55.28	173.20	87.06	71.87

Breve termine

Lungo termine

Palo

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	28.9	23.20	108.24	441.78	222.06	115.49	9.98	57.79	176.24	88.59	75.13
4.4	2.4	4	0.70	0.50	0.73	33.10	28.00	30.2	18.36	112.85	1409.84	708.66	120.44	18.36	62.40	1409.84	708.66	80.08
4.5	2.5	4	0.70	0.50	0.73	33.10	28.00	31.4	18.71	117.55	1436.55	722.09	125.46	18.71	67.10	1436.55	722.09	85.10
4.6	2.6	4	0.70	0.50	0.73	33.10	28.00	32.7	19.06	122.34	1463.25	735.51	130.55	19.06	71.89	1463.25	735.51	90.19
4.7	2.7	4	0.70	0.50	0.73	33.10	28.00	33.9	19.40	127.22	1489.96	748.94	135.71	19.40	76.77	1489.96	748.94	95.34
4.8	2.8	4	0.70	0.50	0.73	33.10	28.00	35.2	19.75	132.18	1516.67	762.36	140.93	19.75	81.73	1516.67	762.36	100.57
4.9	2.9	4	0.70	0.50	0.73	33.10	28.00	36.4	20.10	137.24	1543.38	775.79	146.23	20.10	86.79	1543.38	775.79	105.87
5.0	3.0	4	0.70	0.50	0.73	33.10	28.00	37.7	20.45	142.38	1570.09	789.21	151.60	20.45	91.92	1570.09	789.21	111.24
5.1	3.1	4	0.70	0.50	0.73	33.10	28.00	39.0	20.80	147.60	1596.80	802.64	157.04	20.80	97.15	1596.80	802.64	116.68
5.2	3.2	4	0.70	0.50	0.73	33.10	28.00	40.2	21.14	152.92	1623.51	816.06	162.55	21.14	102.46	1623.51	816.06	122.18
5.3	3.3	4	0.70	0.50	0.73	33.10	28.00	41.5	21.49	158.32	1650.21	829.49	168.12	21.49	107.87	1650.21	829.49	127.76
5.4	3.4	4	0.70	0.50	0.73	33.10	28.00	42.7	21.84	163.81	1676.92	842.91	173.77	21.84	113.35	1676.92	842.91	133.41
5.5	3.5	4	0.70	0.50	0.73	33.10	28.00	44.0	22.19	169.38	1703.63	856.34	179.49	22.19	118.93	1703.63	856.34	139.13
5.6	3.6	4	0.70	0.50	0.73	33.10	28.00	45.2	22.53	175.05	1730.34	869.76	185.28	22.53	124.59	1730.34	869.76	144.91
5.7	3.7	4	0.70	0.50	0.73	33.10	28.00	46.5	22.88	180.80	1757.05	883.19	191.13	22.88	130.35	1757.05	883.19	150.77
5.8	3.8	4	0.70	0.50	0.73	33.10	28.00	47.8	23.23	186.64	1783.76	896.61	197.06	23.23	136.18	1783.76	896.61	156.70
5.9	3.9	4	0.70	0.50	0.73	33.10	28.00	49.0	23.58	192.56	1810.46	910.04	203.06	23.58	142.11	1810.46	910.04	162.70
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	50.3	25.00	198.84	564.57	283.78	209.34	13.24	145.44	233.73	117.48	166.61
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	51.5	25.00	205.13	566.40	284.71	215.62	13.41	148.81	236.76	119.01	170.57
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	52.8	25.00	211.41	568.24	285.63	221.91	13.58	152.22	239.80	120.54	174.55
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	54.0	25.00	217.69	570.07	286.55	228.19	13.75	155.68	242.84	122.07	178.58
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	55.3	25.00	223.98	571.90	287.47	234.47	13.92	159.18	245.88	123.59	182.63
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	56.5	25.00	230.26	573.74	288.39	240.76	14.10	162.72	248.92	125.12	186.72
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	57.8	25.00	236.54	575.57	289.31	247.04	14.27	166.30	251.96	126.65	190.85
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	59.1	25.00	242.83	577.40	290.23	253.32	14.44	169.93	255.00	128.18	195.01
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	60.3	25.00	249.11	579.23	291.15	259.61	14.61	173.61	258.04	129.70	199.20
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	61.6	25.00	255.39	581.07	292.08	265.89	14.78	177.32	261.08	131.23	203.43
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	62.8	25.00	261.68	582.90	293.00	272.17	14.96	181.08	264.12	132.76	207.70
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	64.1	25.00	267.96	584.73	293.92	278.46	15.13	184.88	267.16	134.29	212.00
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	65.3	25.00	274.24	586.57	294.84	284.74	15.30	188.73	270.20	135.82	216.33
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	66.6	25.00	280.53	588.40	295.76	291.02	15.47	192.62	273.24	137.34	220.70
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	67.9	25.00	286.81	590.23	296.68	297.31	15.65	196.55	276.27	138.87	225.10
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	69.1	25.00	293.09	592.07	297.60	303.59	15.82	200.53	279.31	140.40	229.54
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	70.4	25.00	299.38	593.90	298.53	309.87	15.99	204.54	282.35	141.93	234.01
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	71.6	25.00	305.66	595.73	299.45	316.16	16.16	208.61	285.39	143.45	238.51
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	72.9	25.00	311.94	597.56	300.37	322.44	16.33	212.71	288.43	144.98	243.05
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	74.1	25.00	318.23	599.40	301.29	328.72	16.51	216.86	291.47	146.51	247.63
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	75.4	25.00	324.51	601.23	302.21	335.00	16.68	221.05	294.51	148.04	252.24
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	76.7	25.00	330.79	603.06	303.13	341.29	16.85	225.29	297.55	149.56	256.88
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	77.9	25.00	337.07	604.90	304.05	347.57	17.02	229.56	300.59	151.09	261.56
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	79.2	25.00	343.36	606.73	304.98	353.85	17.19	233.89	303.63	152.62	266.28
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	80.4	25.00	349.64	608.56	305.90	360.14	17.37	238.25	306.67	154.15	271.03
8.5	6.5	5	0.50	0.50	0.40	19.00	3.56	81.7	25.00	355.92	610.40	306.82	366.42	17.54	242.66	309.44	155.54	275.81
8.6	6.6	5	0.50	0.50	0.40	19.00	3.56	82.9	25.00	362.21	612.23	307.74	372.70	17.71	247.11	312.21	156.94	280.63
8.7	6.7	5	0.50	0.50	0.40	19.00	3.56	84.2	25.00	368.49	614.06	308.66	378.99	17.88	251.60	314.98	158.32	285.48
8.8	6.8	5	0.50	0.50	0.40	19.00	3.56	85.5	25.00	374.77	615.89	309.58	385.27	18.06	256.14	317.73	159.71	290.37
8.9	6.9	5	0.50	0.50	0.40	19.00	3.55	86.7	25.00	381.06	617.73	310.50	391.55	18.23	260.72	320.48	161.09	295.29

9.0	7.0	5	0.50	0.50	0.40	19.00	3.55	88.0	25.00	387.34	619.56	311.42	397.84	18.40	265.35	323.23	162.47	300.24
9.1	7.1	5	0.50	0.50	0.40	19.00	3.55	89.2	25.00	393.62	621.39	312.35	404.12	18.57	270.02	325.96	163.85	305.23
9.2	7.2	5	0.50	0.50	0.40	19.00	3.54	90.5	25.00	399.91	623.23	313.27	410.40	18.74	274.73	328.69	165.22	310.26
9.3	7.3	5	0.50	0.50	0.40	19.00	3.54	91.7	25.00	406.19	625.06	314.19	416.69	18.92	279.48	331.42	166.59	315.32
9.4	7.4	5	0.50	0.50	0.40	19.00	3.54	93.0	25.00	412.47	626.89	315.11	422.97	19.09	284.28	334.13	167.95	320.41
9.5	7.5	5	0.50	0.50	0.40	19.00	3.53	94.2	25.00	418.76	628.73	316.03	429.25	19.26	289.12	336.85	169.32	325.54
9.6	7.6	5	0.50	0.50	0.40	19.00	3.53	95.5	25.00	425.04	630.56	316.95	435.54	19.43	294.00	339.55	170.68	330.71
9.7	7.7	5	0.50	0.50	0.40	19.00	3.53	96.8	25.00	431.32	632.39	317.87	441.82	19.60	298.93	342.25	172.03	335.90
9.8	7.8	5	0.50	0.50	0.40	19.00	3.52	98.0	25.00	437.61	634.22	318.80	448.10	19.78	303.90	344.94	173.38	341.14
9.9	7.9	5	0.50	0.50	0.40	19.00	3.52	99.3	25.00	443.89	636.06	319.72	454.39	19.95	308.91	347.62	174.73	346.40
10.0	8.0	5	0.50	0.50	0.40	19.00	3.52	100.5	25.00	450.17	637.89	320.64	460.67	20.12	313.97	350.30	176.08	351.71
10.1	8.1	5	0.50	0.50	0.40	19.00	3.51	101.8	25.00	456.46	639.72	321.56	466.95	20.29	319.07	352.96	177.42	357.04
10.2	8.2	5	0.50	0.50	0.40	19.00	3.51	103.0	25.00	462.74	641.56	322.48	473.23	20.46	324.21	355.63	178.76	362.41
10.3	8.3	5	0.50	0.50	0.40	19.00	3.51	104.3	25.00	469.02	643.39	323.40	479.52	20.64	329.40	358.28	180.09	367.82
10.4	8.4	5	0.50	0.50	0.40	19.00	3.50	105.6	25.00	475.30	645.22	324.32	485.80	20.81	334.63	360.93	181.42	373.26
10.5	8.5	5	0.50	0.50	0.40	19.00	3.50	106.8	25.00	481.59	647.06	325.25	492.08	20.98	339.90	363.57	182.75	378.74
10.6	8.6	5	0.50	0.50	0.40	19.00	3.50	108.1	25.00	487.87	648.89	326.17	498.37	21.15	345.22	366.21	184.08	384.25
10.7	8.7	5	0.50	0.50	0.40	19.00	3.49	109.3	25.00	494.15	650.72	327.09	504.65	21.33	350.58	368.83	185.40	389.79
10.8	8.8	5	0.50	0.50	0.40	19.00	3.49	110.6	25.00	500.44	652.55	328.01	510.93	21.50	355.98	371.45	186.71	395.37
10.9	8.9	5	0.50	0.50	0.40	19.00	3.49	111.8	25.00	506.72	654.39	328.93	517.22	21.67	361.43	374.06	188.03	400.98
11.0	9.0	5	0.50	0.50	0.40	19.00	3.48	113.1	25.00	513.00	656.22	329.85	523.50	21.84	366.92	376.67	189.33	406.63
11.1	9.1	6	0.70	0.50	0.86	37.70	44.63	114.4	46.91	524.79	4868.30	2447.07	534.19	46.91	378.71	4868.30	2447.07	417.32
11.2	9.2	6	0.70	0.50	0.86	37.70	44.60	115.6	47.32	536.69	4907.53	2466.79	544.96	47.32	390.60	4907.53	2466.79	428.09
11.3	9.3	6	0.70	0.50	0.86	37.70	44.57	116.9	47.73	548.68	4946.67	2486.47	555.81	47.73	402.59	4946.67	2486.47	438.94
11.4	9.4	6	0.70	0.50	0.86	37.70	44.54	118.1	48.14	560.78	4985.74	2506.10	566.75	48.14	414.69	4985.74	2506.10	449.88
11.5	9.5	6	0.70	0.50	0.86	37.70	44.51	119.4	48.55	572.98	5024.72	2525.70	577.77	48.55	426.90	5024.72	2525.70	460.90
11.6	9.6	6	0.70	0.50	0.86	37.70	44.48	120.6	48.96	585.29	5063.62	2545.25	588.87	48.96	439.20	5063.62	2545.25	472.00
11.7	9.7	7	0.70	0.50	0.79	35.40	35.15	121.9	45.49	596.72	4035.67	2028.55	599.27	45.49	450.63	4035.67	2028.55	482.40
11.8	9.8	7	0.70	0.50	0.79	35.40	35.13	123.2	45.87	608.25	4066.20	2043.89	609.75	45.87	462.16	4066.20	2043.89	492.88
11.9	9.9	8	0.70	0.50	0.86	37.70	44.38	124.4	50.19	620.87	5179.80	2603.65	621.10	50.19	474.78	5179.80	2603.65	504.23
12.0	10.0	8	0.70	0.50	0.86	37.70	44.35	125.7	50.60	633.58	5218.36	2623.04	632.53	50.60	487.50	5218.36	2623.04	515.66
12.1	10.1	8	0.70	0.50	0.86	37.70	44.32	126.9	51.01	646.40	5256.83	2642.37	644.04	51.01	500.32	5256.83	2642.37	527.17
12.2	10.2	8	0.70	0.50	0.86	37.70	44.29	128.2	51.42	659.33	5295.22	2661.67	655.64	51.42	513.24	5295.22	2661.67	538.77
12.3	10.3	8	0.70	0.50	0.86	37.70	44.25	129.4	51.83	672.35	5333.52	2680.92	667.32	51.83	526.27	5333.52	2680.92	550.45
12.4	10.4	8	0.70	0.50	0.86	37.70	44.22	130.7	52.24	685.48	5371.72	2700.12	679.08	52.24	539.40	5371.72	2700.12	562.21
12.5	10.5	8	0.70	0.50	0.86	37.70	44.19	131.9	52.65	698.72	5409.84	2719.28	690.92	52.65	552.63	5409.84	2719.28	574.05
12.6	10.6	8	0.70	0.50	0.86	37.70	44.15	133.2	53.06	712.05	5447.87	2738.40	702.85	53.06	565.97	5447.87	2738.40	585.98
12.7	10.7	8	0.70	0.50	0.86	37.70	44.12	134.5	53.47	725.49	5485.81	2757.47	714.85	53.47	579.41	5485.81	2757.47	597.99
12.8	10.8	8	0.70	0.50	0.86	37.70	44.09	135.7	53.88	739.04	5523.66	2776.49	726.95	53.88	592.95	5523.66	2776.49	610.08
12.9	10.9	8	0.70	0.50	0.86	37.70	44.05	137.0	54.29	752.68	5561.41	2795.47	739.12	54.29	606.59	5561.41	2795.47	622.25
13.0	11.0	8	0.70	0.50	0.86	37.70	44.02	138.2	54.70	766.43	5599.07	2814.40	751.37	54.70	620.34	5599.07	2814.40	634.50
13.1	11.1	8	0.70	0.50	0.86	37.70	43.98	139.5	55.11	780.28	5636.64	2833.28	763.71	55.11	634.20	5636.64	2833.28	646.84
13.2	11.2	8	0.70	0.50	0.86	37.70	43.95	140.7	55.53	794.24	5674.11	2852.12	776.13	55.53	648.15	5674.11	2852.12	659.26
13.3	11.3	8	0.70	0.50	0.86	37.70	43.91	142.0	55.94	808.30	5711.49	2870.91	788.64	55.94	662.21	5711.49	2870.91	671.77
13.4	11.4	8	0.70	0.50	0.86	37.70	43.88	143.3	56.35	822.46	5748.78	2889.65	801.22	56.35	676.37	5748.78	2889.65	684.35
13.5	11.5	8	0.70	0.50	0.86	37.70	43.84	144.5	56.76	836.72	5785.96	2908.34	813.89	56.76	690.63	5785.96	2908.34	697.02
13.6	11.6	8	0.70	0.50	0.86	37.70	43.81	145.8	57.17	851.09	5823.05	2926.99	826.64	57.17	705.00	5823.05	2926.99	709.77

13.7	11.7	8	0.70	0.50	0.86	37.70	43.77	147.0	57.58	865.56	5860.04	2945.58	839.47	57.58	719.47	5860.04	2945.58	722.60
13.8	11.8	8	0.70	0.50	0.86	37.70	43.74	148.3	57.99	880.13	5896.94	2964.12	852.39	57.99	734.05	5896.94	2964.12	735.52
13.9	11.9	8	0.70	0.50	0.86	37.70	43.70	149.5	58.40	894.81	5933.73	2982.62	865.39	58.40	748.72	5933.73	2982.62	748.52
14.0	12.0	8	0.70	0.50	0.86	37.70	43.66	150.8	58.81	909.59	5970.43	3001.06	878.47	58.81	763.50	5970.43	3001.06	761.60
14.1	12.1	8	0.70	0.50	0.86	37.70	43.63	152.1	59.22	924.47	6007.02	3019.46	891.63	59.22	778.39	6007.02	3019.46	774.76
14.2	12.2	8	0.70	0.50	0.86	37.70	43.59	153.3	59.63	939.46	6043.51	3037.80	904.88	59.63	793.37	6043.51	3037.80	788.01
14.3	12.3	8	0.70	0.50	0.86	37.70	43.55	154.6	60.04	954.55	6079.90	3056.09	918.20	60.04	808.46	6079.90	3056.09	801.34
14.4	12.4	8	0.70	0.50	0.86	37.70	43.51	155.8	60.45	969.74	6116.19	3074.33	931.62	60.45	823.65	6116.19	3074.33	814.75
14.5	12.5	8	0.70	0.50	0.86	37.70	43.48	157.1	60.86	985.04	6152.37	3092.52	945.11	60.86	838.95	6152.37	3092.52	828.24
14.6	12.6	8	0.70	0.50	0.86	37.70	43.44	158.3	61.27	1000.43	6188.45	3110.66	958.68	61.27	854.35	6188.45	3110.66	841.81
14.7	12.7	8	0.70	0.50	0.86	37.70	43.40	159.6	61.68	1015.94	6224.43	3128.74	972.34	61.68	869.85	6224.43	3128.74	855.47
14.8	12.8	9	0.70	0.50	0.79	35.40	34.27	160.8	57.21	1030.32	4947.26	2486.76	985.10	57.21	884.23	4947.26	2486.76	868.23
14.9	12.9	9	0.70	0.50	0.79	35.40	34.25	162.1	57.59	1044.79	4977.42	2501.93	997.94	57.59	898.70	4977.42	2501.93	881.07
15.0	13.0	10	0.70	0.50	0.90	38.85	48.47	163.4	65.51	1061.25	7089.94	3563.79	1012.37	65.51	915.17	7089.94	3563.79	895.50
15.1	13.1	10	0.70	0.50	0.90	38.85	48.44	164.6	65.94	1077.83	7132.46	3585.17	1026.88	65.94	931.74	7132.46	3585.17	910.01
15.2	13.2	10	0.70	0.50	0.90	38.85	48.42	165.9	66.36	1094.51	7174.94	3606.52	1041.48	66.36	948.42	7174.94	3606.52	924.61
15.3	13.3	10	0.70	0.50	0.90	38.85	48.39	167.1	66.79	1111.29	7217.36	3627.84	1056.17	66.79	965.20	7217.36	3627.84	939.30
15.4	13.4	10	0.70	0.50	0.90	38.85	48.37	168.4	67.22	1128.19	7259.74	3649.14	1070.94	67.22	982.10	7259.74	3649.14	954.07
15.5	13.5	10	0.70	0.50	0.90	38.85	48.34	169.6	67.65	1145.19	7302.08	3670.42	1085.80	67.65	999.10	7302.08	3670.42	968.93
15.6	13.6	10	0.70	0.50	0.90	38.85	48.32	170.9	68.07	1162.30	7344.36	3691.68	1100.74	68.07	1016.21	7344.36	3691.68	983.87
15.7	13.7	10	0.70	0.50	0.90	38.85	48.29	172.2	68.50	1179.51	7386.61	3712.91	1115.77	68.50	1033.42	7386.61	3712.91	998.90
15.8	13.8	10	0.70	0.50	0.90	38.85	48.27	173.4	68.93	1196.83	7428.80	3734.12	1130.88	68.93	1050.75	7428.80	3734.12	1014.01
15.9	13.9	10	0.70	0.50	0.90	38.85	48.24	174.7	69.35	1214.27	7470.95	3755.31	1146.09	69.35	1068.18	7470.95	3755.31	1029.22
16.0	14.0	10	0.70	0.50	0.90	38.85	48.22	175.9	69.78	1231.80	7513.05	3776.47	1161.37	69.78	1085.72	7513.05	3776.47	1044.50
16.1	14.1	10	0.70	0.50	0.90	38.85	48.19	177.2	70.21	1249.45	7555.11	3797.61	1176.75	70.21	1103.36	7555.11	3797.61	1059.88
16.2	14.2	10	0.70	0.50	0.90	38.85	48.17	178.4	70.64	1267.20	7597.12	3818.73	1192.20	70.64	1121.12	7597.12	3818.73	1075.33
16.3	14.3	10	0.70	0.50	0.90	38.85	48.14	179.7	71.06	1285.06	7639.09	3839.83	1207.75	71.06	1138.98	7639.09	3839.83	1090.88
16.4	14.4	10	0.70	0.50	0.90	38.85	48.12	181.0	71.49	1303.03	7681.01	3860.90	1223.38	71.49	1156.94	7681.01	3860.90	1106.51
16.5	14.5	10	0.70	0.50	0.90	38.85	48.09	182.2	71.92	1321.11	7722.88	3881.95	1239.10	71.92	1175.02	7722.88	3881.95	1122.23
16.6	14.6	10	0.70	0.50	0.90	38.85	48.07	183.5	72.35	1339.29	7764.71	3902.97	1254.90	72.35	1193.20	7764.71	3902.97	1138.03
16.7	14.7	10	0.70	0.50	0.90	38.85	48.04	184.7	72.77	1357.58	7806.50	3923.97	1270.79	72.77	1211.49	7806.50	3923.97	1153.92
16.8	14.8	10	0.70	0.50	0.90	38.85	48.02	186.0	73.20	1375.97	7848.23	3944.95	1286.76	73.20	1229.89	7848.23	3944.95	1169.89
16.9	14.9	11	0.70	0.50	0.79	35.40	33.90	187.2	65.15	1392.35	5574.07	2801.84	1301.12	65.15	1246.26	5574.07	2801.84	1184.25
17.0	15.0	11	0.70	0.50	0.79	35.40	33.89	188.5	65.53	1408.82	5603.57	2816.66	1315.55	65.53	1262.73	5603.57	2816.66	1198.68

1.2.2.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**2.0**	**19.35**	**35**		0.70	0.50	0.70
2	**2.0**	**2.9**	**19.35**	**35**		0.70	0.50	0.70
3	**2.9**	**4.3**	**18.33**	**22**	**40**	0.58	0.50	0.40
4	**4.3**	**5.9**	**19.35**			0.70	0.50	0.00
5	**5.9**	**11.0**	**18.33**	**22**	**50**	0.50	0.50	0.40
6	**11.0**	**11.6**	**19.35**	**41**		0.70	0.50	0.86
7	**11.6**	**11.8**	**19.35**			0.70	0.50	0.00
8	**11.8**	**14.7**	**19.35**	**41**		0.70	0.50	0.86
9	**14.7**	**14.9**	**19.35**			0.70	0.50	0.00
10	**14.9**	**16.8**	**19.35**	**42**		0.70	0.50	0.90
11	**16.8**	**17.4**	**19.35**			0.70	0.50	0.00
12	**17.4**	**17.8**	**19.35**	**41**		0.70	0.50	0.86
13	**17.8**	**18.0**	**19.35**			0.70	0.50	0.00

1.2.2.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1912	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.8	10.43	3.93	732.75	828.73	5.97
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	5.7	10.76	7.99	756.18	855.22	12.05
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	8.5	11.10	12.17	779.60	881.71	18.22
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	11.3	11.43	16.48	803.02	908.20	24.49
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	14.1	11.76	20.92	826.45	934.69	30.87
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	17.0	12.10	25.48	849.87	961.18	37.34
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	19.8	12.43	30.16	873.29	987.67	43.92
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	22.6	12.76	34.97	896.72	1014.16	50.60
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	25.4	13.10	39.91	920.14	1040.66	57.37
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	28.3	23.20	48.66	417.95	472.69	67.20
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	31.1	23.20	57.40	419.78	474.76	77.02
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	33.9	23.20	66.15	421.61	476.83	86.85
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	36.8	23.20	74.89	423.45	478.91	96.67
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	39.6	23.20	83.64	425.28	480.98	106.50
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	42.4	23.20	92.39	427.11	483.05	116.32
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	101.13	428.95	485.13	126.15
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	48.1	23.20	109.88	430.78	487.20	135.97
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	50.9	23.20	118.63	432.61	489.27	145.79
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	53.7	23.20	127.37	434.45	491.35	155.62
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	56.5	23.20	136.12	436.28	493.42	165.44
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	59.4	23.20	144.86	438.11	495.49	175.27
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	62.2	23.20	153.61	439.94	497.56	185.09

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	65.0	23.20	162.36	441.78	499.64	194.92
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	67.9	0.00	162.36	0.00	0.00	197.74
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	162.36	0.00	0.00	200.57
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	73.5	0.00	162.36	0.00	0.00	203.40
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	76.3	0.00	162.36	0.00	0.00	206.23
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	79.2	0.00	162.36	0.00	0.00	209.05
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	82.0	0.00	162.36	0.00	0.00	211.88
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	84.8	0.00	162.36	0.00	0.00	214.71
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	87.7	0.00	162.36	0.00	0.00	217.54
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	90.5	0.00	162.36	0.00	0.00	220.36
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	162.36	0.00	0.00	223.19
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	162.36	0.00	0.00	226.02
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	162.36	0.00	0.00	228.85
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	162.36	0.00	0.00	231.67
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	162.36	0.00	0.00	234.50
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	162.36	0.00	0.00	237.33
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	162.36	0.00	0.00	240.15
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	113.1	25.00	171.78	564.57	638.51	250.52
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	115.9	25.00	181.21	566.40	640.59	260.89
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	118.8	25.00	190.63	568.24	642.66	271.26
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	121.6	25.00	200.06	570.07	644.73	281.62
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	124.4	25.00	209.48	571.90	646.81	291.99
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	127.2	25.00	218.91	573.74	648.88	302.36
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	130.1	25.00	228.33	575.57	650.95	312.73
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	132.9	25.00	237.75	577.40	653.03	323.09
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	135.7	25.00	247.18	579.23	655.10	333.46
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	138.5	25.00	256.60	581.07	657.17	343.83
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	266.03	582.90	659.24	354.19
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	144.2	25.00	275.45	584.73	661.32	364.56
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	147.0	25.00	284.88	586.57	663.39	374.93
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	149.9	25.00	294.30	588.40	665.46	385.30
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	152.7	25.00	303.73	590.23	667.54	395.66
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	155.5	25.00	313.15	592.07	669.61	406.03
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	158.3	25.00	322.58	593.90	671.68	416.40
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	161.2	25.00	332.00	595.73	673.76	426.77
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	164.0	25.00	341.43	597.56	675.83	437.13
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	166.8	25.00	350.85	599.40	677.90	447.50
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	169.6	25.00	360.28	601.23	679.98	457.87
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	172.5	25.00	369.70	603.06	682.05	468.23
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	175.3	25.00	379.13	604.90	684.12	478.60
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	178.1	25.00	388.55	606.73	686.19	488.97
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	181.0	25.00	397.98	608.56	688.27	499.34
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	183.8	25.00	407.40	610.40	690.34	509.70
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	186.6	25.00	416.83	612.23	692.41	520.07
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	189.4	25.00	426.25	614.06	694.49	530.44
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	192.3	25.00	435.67	615.89	696.56	540.81
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	195.1	25.00	445.10	617.73	698.63	551.17

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	197.9	25.00	454.52	619.56	700.71	561.54
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	200.7	25.00	463.95	621.39	702.78	571.91
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	203.6	25.00	473.37	623.23	704.85	582.27
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	206.4	25.00	482.80	625.06	706.93	592.64
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	209.2	25.00	492.22	626.89	709.00	603.01
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	212.1	25.00	501.65	628.73	711.07	613.38
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	214.9	25.00	511.07	630.56	713.14	623.74
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	217.7	25.00	520.50	632.39	715.22	634.11
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	220.5	25.00	529.92	634.22	717.29	644.48
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	223.4	25.00	539.35	636.06	719.36	654.85
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	226.2	25.00	548.77	637.89	721.44	665.21
10.1	8.1	5	0.50	0.50	0.40	19.00	3.57	229.0	25.00	558.20	639.72	723.51	675.58
10.2	8.2	5	0.50	0.50	0.40	19.00	3.57	231.8	25.00	567.62	641.56	725.58	685.95
10.3	8.3	5	0.50	0.50	0.40	19.00	3.57	234.7	25.00	577.05	643.39	727.66	696.31
10.4	8.4	5	0.50	0.50	0.40	19.00	3.57	237.5	25.00	586.47	645.22	729.73	706.68
10.5	8.5	5	0.50	0.50	0.40	19.00	3.57	240.3	25.00	595.90	647.06	731.80	717.05
10.6	8.6	5	0.50	0.50	0.40	19.00	3.57	243.2	25.00	605.32	648.89	733.88	727.42
10.7	8.7	5	0.50	0.50	0.40	19.00	3.57	246.0	25.00	614.75	650.72	735.95	737.78
10.8	8.8	5	0.50	0.50	0.40	19.00	3.57	248.8	25.00	624.17	652.55	738.02	748.15
10.9	8.9	5	0.50	0.50	0.40	19.00	3.57	251.6	25.00	633.60	654.39	740.09	758.52
11.0	9.0	5	0.50	0.50	0.40	19.00	3.57	254.5	25.00	643.02	656.22	742.17	768.89
11.1	9.1	6	0.70	0.50	0.86	37.70	45.38	257.3	46.91	660.70	4949.67	5597.95	785.86
11.2	9.2	6	0.70	0.50	0.86	37.70	45.38	260.1	47.32	678.54	4992.96	5646.91	802.96
11.3	9.3	6	0.70	0.50	0.86	37.70	45.38	263.0	47.73	696.54	5036.25	5695.87	820.18
11.4	9.4	6	0.70	0.50	0.86	37.70	45.38	265.8	48.14	714.69	5079.55	5744.83	837.53
11.5	9.5	6	0.70	0.50	0.86	37.70	45.38	268.6	48.55	732.99	5122.84	5793.79	855.00
11.6	9.6	6	0.70	0.50	0.86	37.70	45.38	271.4	48.96	751.45	5166.13	5842.75	872.59
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	274.3	0.00	751.45	0.00	0.00	875.42
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	277.1	0.00	751.45	0.00	0.00	878.25
11.9	9.9	8	0.70	0.50	0.86	37.70	45.33	279.9	50.19	770.37	5290.13	5983.00	896.21
12.0	10.0	8	0.70	0.50	0.86	37.70	45.31	282.7	50.60	789.44	5331.38	6029.65	914.30
12.1	10.1	8	0.70	0.50	0.86	37.70	45.29	285.6	51.01	808.68	5372.59	6076.25	932.51
12.2	10.2	8	0.70	0.50	0.86	37.70	45.28	288.4	51.42	828.06	5413.75	6122.81	950.85
12.3	10.3	8	0.70	0.50	0.86	37.70	45.26	291.2	51.83	847.60	5454.88	6169.32	969.31
12.4	10.4	8	0.70	0.50	0.86	37.70	45.24	294.1	52.24	867.30	5495.95	6215.78	987.89
12.5	10.5	8	0.70	0.50	0.86	37.70	45.23	296.9	52.65	887.15	5536.99	6262.19	1006.60
12.6	10.6	8	0.70	0.50	0.86	37.70	45.21	299.7	53.06	907.15	5577.98	6308.55	1025.43
12.7	10.7	8	0.70	0.50	0.86	37.70	45.19	302.5	53.47	927.31	5618.92	6354.85	1044.38
12.8	10.8	8	0.70	0.50	0.86	37.70	45.17	305.4	53.88	947.62	5659.83	6401.11	1063.46
12.9	10.9	8	0.70	0.50	0.86	37.70	45.16	308.2	54.29	968.09	5700.68	6447.32	1082.66
13.0	11.0	8	0.70	0.50	0.86	37.70	45.14	311.0	54.70	988.72	5741.50	6493.48	1101.99
13.1	11.1	8	0.70	0.50	0.86	37.70	45.12	313.8	55.11	1009.49	5782.26	6539.59	1121.44
13.2	11.2	8	0.70	0.50	0.86	37.70	45.10	316.7	55.53	1030.43	5822.99	6585.64	1141.01
13.3	11.3	8	0.70	0.50	0.86	37.70	45.08	319.5	55.94	1051.51	5863.66	6631.64	1160.71
13.4	11.4	8	0.70	0.50	0.86	37.70	45.07	322.3	56.35	1072.76	5904.29	6677.60	1180.53
13.5	11.5	8	0.70	0.50	0.86	37.70	45.05	325.2	56.76	1094.15	5944.87	6723.49	1200.48
13.6	11.6	8	0.70	0.50	0.86	37.70	45.03	328.0	57.17	1115.70	5985.41	6769.34	1220.54

13.7	11.7	8	0.70	0.50	0.86	37.70	45.01	330.8	57.58	1137.41	6025.90	6815.13	1240.74
13.8	11.8	8	0.70	0.50	0.86	37.70	44.99	333.6	57.99	1159.27	6066.34	6860.87	1261.05
13.9	11.9	8	0.70	0.50	0.86	37.70	44.97	336.5	58.40	1181.28	6106.74	6906.56	1281.49
14.0	12.0	8	0.70	0.50	0.86	37.70	44.95	339.3	58.81	1203.45	6147.09	6952.19	1302.06
14.1	12.1	8	0.70	0.50	0.86	37.70	44.94	342.1	59.22	1225.78	6187.39	6997.77	1322.74
14.2	12.2	8	0.70	0.50	0.86	37.70	44.92	344.9	59.63	1248.26	6227.64	7043.29	1343.55
14.3	12.3	8	0.70	0.50	0.86	37.70	44.90	347.8	60.04	1270.89	6267.84	7088.76	1364.49
14.4	12.4	8	0.70	0.50	0.86	37.70	44.88	350.6	60.45	1293.68	6307.99	7134.17	1385.55
14.5	12.5	8	0.70	0.50	0.86	37.70	44.86	353.4	60.86	1316.62	6348.10	7179.53	1406.73
14.6	12.6	8	0.70	0.50	0.86	37.70	44.84	356.3	61.27	1339.72	6388.15	7224.83	1428.03
14.7	12.7	8	0.70	0.50	0.86	37.70	44.82	359.1	61.68	1362.97	6428.16	7270.08	1449.46
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	361.9	0.00	1362.97	0.00	0.00	1452.29
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	364.7	0.00	1362.97	0.00	0.00	1455.12
15.0	13.0	10	0.70	0.50	0.90	38.85	50.06	367.6	65.51	1387.67	7322.58	8281.65	1477.70
15.1	13.1	10	0.70	0.50	0.90	38.85	50.04	370.4	65.94	1412.53	7367.16	8332.06	1500.42
15.2	13.2	10	0.70	0.50	0.90	38.85	50.02	373.2	66.36	1437.55	7411.68	8382.42	1523.26
15.3	13.3	10	0.70	0.50	0.90	38.85	49.99	376.0	66.79	1462.73	7456.15	8432.71	1546.23
15.4	13.4	10	0.70	0.50	0.90	38.85	49.97	378.9	67.22	1488.07	7500.56	8482.93	1569.33
15.5	13.5	10	0.70	0.50	0.90	38.85	49.95	381.7	67.65	1513.57	7544.91	8533.09	1592.56
15.6	13.6	10	0.70	0.50	0.90	38.85	49.93	384.5	68.07	1539.23	7589.20	8583.18	1615.92
15.7	13.7	10	0.70	0.50	0.90	38.85	49.91	387.4	68.50	1565.06	7633.43	8633.21	1639.40
15.8	13.8	10	0.70	0.50	0.90	38.85	49.88	390.2	68.93	1591.04	7677.61	8683.17	1663.02
15.9	13.9	10	0.70	0.50	0.90	38.85	49.86	393.0	69.35	1617.19	7721.73	8733.07	1686.76
16.0	14.0	10	0.70	0.50	0.90	38.85	49.84	395.8	69.78	1643.50	7765.79	8782.90	1710.64
16.1	14.1	10	0.70	0.50	0.90	38.85	49.82	398.7	70.21	1669.96	7809.79	8832.66	1734.64
16.2	14.2	10	0.70	0.50	0.90	38.85	49.79	401.5	70.64	1696.59	7853.73	8882.35	1758.77
16.3	14.3	10	0.70	0.50	0.90	38.85	49.77	404.3	71.06	1723.38	7897.60	8931.98	1783.03
16.4	14.4	10	0.70	0.50	0.90	38.85	49.75	407.2	71.49	1750.33	7941.42	8981.54	1807.42
16.5	14.5	10	0.70	0.50	0.90	38.85	49.72	410.0	71.92	1777.45	7985.18	9031.03	1831.94
16.6	14.6	10	0.70	0.50	0.90	38.85	49.70	412.8	72.35	1804.72	8028.88	9080.45	1856.58
16.7	14.7	10	0.70	0.50	0.90	38.85	49.68	415.6	72.77	1832.16	8072.52	9129.80	1881.36
16.8	14.8	10	0.70	0.50	0.90	38.85	49.65	418.5	73.20	1859.75	8116.09	9179.08	1906.26
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1859.75	0.00	0.00	1909.09
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1859.75	0.00	0.00	1911.92

1.2.2.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1534	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	2.0	10.43	3.28	732.75	575.50	4.58
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	3.9	10.76	6.66	756.18	593.90	9.25
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	5.9	11.10	10.14	779.60	612.30	14.01
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	7.9	11.43	13.73	803.02	630.69	18.84
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	9.8	11.76	17.43	826.45	649.09	23.76
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	11.8	12.10	21.23	849.87	667.49	28.76
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	13.7	12.43	25.13	873.29	685.88	33.85
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	15.7	12.76	29.14	896.72	704.28	39.02
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	17.7	13.10	33.26	920.14	722.68	44.28
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	19.6	23.20	40.55	417.95	328.26	52.07
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	21.6	23.20	47.84	419.78	329.70	59.87
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	23.6	23.20	55.12	421.61	331.13	67.66
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	25.5	23.20	62.41	423.45	332.57	75.46
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	27.5	23.20	69.70	425.28	334.01	83.25
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	29.5	23.20	76.99	427.11	335.45	91.04
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	31.4	23.20	84.28	428.95	336.89	98.84
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	33.4	23.20	91.57	430.78	338.33	106.63
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	35.3	23.20	98.85	432.61	339.77	114.43
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	37.3	23.20	106.14	434.45	341.21	122.22
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	39.3	23.20	113.43	436.28	342.65	130.02
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	41.2	23.20	120.72	438.11	344.09	137.81
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	43.2	23.20	128.01	439.94	345.53	145.60

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	45.2	23.20	135.30	441.78	346.97	153.40
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	47.1	0.00	135.30	0.00	0.00	155.36
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	49.1	0.00	135.30	0.00	0.00	157.32
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	51.1	0.00	135.30	0.00	0.00	159.29
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	53.0	0.00	135.30	0.00	0.00	161.25
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	55.0	0.00	135.30	0.00	0.00	163.22
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	56.9	0.00	135.30	0.00	0.00	165.18
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	58.9	0.00	135.30	0.00	0.00	167.14
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	60.9	0.00	135.30	0.00	0.00	169.11
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	62.8	0.00	135.30	0.00	0.00	171.07
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	135.30	0.00	0.00	173.03
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	135.30	0.00	0.00	175.00
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	135.30	0.00	0.00	176.96
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	135.30	0.00	0.00	178.92
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	135.30	0.00	0.00	180.89
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	135.30	0.00	0.00	182.85
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	135.30	0.00	0.00	184.81
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	78.5	25.00	143.15	564.57	443.41	193.06
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	80.5	25.00	151.00	566.40	444.85	201.31
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	82.5	25.00	158.86	568.24	446.29	209.55
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	84.4	25.00	166.71	570.07	447.73	217.80
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	86.4	25.00	174.57	571.90	449.17	226.05
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	88.4	25.00	182.42	573.74	450.61	234.29
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	90.3	25.00	190.27	575.57	452.05	242.54
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	92.3	25.00	198.13	577.40	453.49	250.79
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	94.2	25.00	205.98	579.23	454.93	259.03
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	96.2	25.00	213.84	581.07	456.37	267.28
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	98.2	25.00	221.69	582.90	457.81	275.53
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	100.1	25.00	229.54	584.73	459.25	283.77
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	102.1	25.00	237.40	586.57	460.69	292.02
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	104.1	25.00	245.25	588.40	462.13	300.27
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	106.0	25.00	253.11	590.23	463.57	308.51
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	108.0	25.00	260.96	592.07	465.01	316.76
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	110.0	25.00	268.81	593.90	466.45	325.01
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	111.9	25.00	276.67	595.73	467.89	333.25
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	113.9	25.00	284.52	597.56	469.33	341.50
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	115.8	25.00	292.38	599.40	470.77	349.75
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	117.8	25.00	300.23	601.23	472.20	357.99
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	119.8	25.00	308.08	603.06	473.64	366.24
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	121.7	25.00	315.94	604.90	475.08	374.49
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	123.7	25.00	323.79	606.73	476.52	382.73
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	125.7	25.00	331.65	608.56	477.96	390.98
8.5	6.5	5	0.50	0.50	0.40	19.00	3.57	127.6	25.00	339.50	610.40	479.40	399.23
8.6	6.6	5	0.50	0.50	0.40	19.00	3.57	129.6	25.00	347.35	612.23	480.84	407.47
8.7	6.7	5	0.50	0.50	0.40	19.00	3.57	131.6	25.00	355.21	614.06	482.28	415.72
8.8	6.8	5	0.50	0.50	0.40	19.00	3.57	133.5	25.00	363.06	615.89	483.72	423.97
8.9	6.9	5	0.50	0.50	0.40	19.00	3.57	135.5	25.00	370.92	617.73	485.16	432.21

9.0	7.0	5	0.50	0.50	0.40	19.00	3.57	137.4	25.00	378.77	619.56	486.60	440.46
9.1	7.1	5	0.50	0.50	0.40	19.00	3.57	139.4	25.00	386.62	621.39	488.04	448.71
9.2	7.2	5	0.50	0.50	0.40	19.00	3.57	141.4	25.00	394.48	623.23	489.48	456.95
9.3	7.3	5	0.50	0.50	0.40	19.00	3.57	143.3	25.00	402.33	625.06	490.92	465.20
9.4	7.4	5	0.50	0.50	0.40	19.00	3.57	145.3	25.00	410.19	626.89	492.36	473.45
9.5	7.5	5	0.50	0.50	0.40	19.00	3.57	147.3	25.00	418.04	628.73	493.80	481.69
9.6	7.6	5	0.50	0.50	0.40	19.00	3.57	149.2	25.00	425.89	630.56	495.24	489.94
9.7	7.7	5	0.50	0.50	0.40	19.00	3.57	151.2	25.00	433.75	632.39	496.68	498.19
9.8	7.8	5	0.50	0.50	0.40	19.00	3.57	153.2	25.00	441.60	634.22	498.12	506.43
9.9	7.9	5	0.50	0.50	0.40	19.00	3.57	155.1	25.00	449.46	636.06	499.56	514.68
10.0	8.0	5	0.50	0.50	0.40	19.00	3.57	157.1	25.00	457.31	637.89	501.00	522.93
10.1	8.1	5	0.50	0.50	0.40	19.00	3.56	159.0	25.00	465.16	639.72	502.44	531.17
10.2	8.2	5	0.50	0.50	0.40	19.00	3.56	161.0	25.00	473.02	641.56	503.88	539.42
10.3	8.3	5	0.50	0.50	0.40	19.00	3.56	163.0	25.00	480.87	643.39	505.32	547.67
10.4	8.4	5	0.50	0.50	0.40	19.00	3.56	164.9	25.00	488.73	645.22	506.76	555.91
10.5	8.5	5	0.50	0.50	0.40	19.00	3.56	166.9	25.00	496.58	647.06	508.20	564.16
10.6	8.6	5	0.50	0.50	0.40	19.00	3.55	168.9	25.00	504.43	648.89	509.64	572.41
10.7	8.7	5	0.50	0.50	0.40	19.00	3.55	170.8	25.00	512.29	650.72	511.08	580.65
10.8	8.8	5	0.50	0.50	0.40	19.00	3.55	172.8	25.00	520.14	652.55	512.51	588.90
10.9	8.9	5	0.50	0.50	0.40	19.00	3.55	174.8	25.00	528.00	654.39	513.95	597.15
11.0	9.0	5	0.50	0.50	0.40	19.00	3.54	176.7	25.00	535.85	656.22	515.39	605.39
11.1	9.1	6	0.70	0.50	0.86	37.70	45.15	178.7	46.91	550.59	4924.89	3868.00	619.15
11.2	9.2	6	0.70	0.50	0.86	37.70	45.13	180.6	47.32	565.45	4965.61	3899.98	633.00
11.3	9.3	6	0.70	0.50	0.86	37.70	45.11	182.6	47.73	580.45	5006.27	3931.92	646.96
11.4	9.4	6	0.70	0.50	0.86	37.70	45.09	184.6	48.14	595.57	5046.88	3963.81	661.03
11.5	9.5	6	0.70	0.50	0.86	37.70	45.07	186.5	48.55	610.82	5087.44	3995.66	675.19
11.6	9.6	6	0.70	0.50	0.86	37.70	45.04	188.5	48.96	626.21	5127.93	4027.47	689.46
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	190.5	0.00	626.21	0.00	0.00	691.42
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	192.4	0.00	626.21	0.00	0.00	693.39
11.9	9.9	8	0.70	0.50	0.86	37.70	44.98	194.4	50.19	641.97	5249.08	4122.62	707.96
12.0	10.0	8	0.70	0.50	0.86	37.70	44.95	196.3	50.60	657.87	5289.35	4154.25	722.65
12.1	10.1	8	0.70	0.50	0.86	37.70	44.93	198.3	51.01	673.90	5329.57	4185.83	737.43
12.2	10.2	8	0.70	0.50	0.86	37.70	44.91	200.3	51.42	690.05	5369.72	4217.37	752.32
12.3	10.3	8	0.70	0.50	0.86	37.70	44.89	202.2	51.83	706.33	5409.81	4248.86	767.31
12.4	10.4	8	0.70	0.50	0.86	37.70	44.86	204.2	52.24	722.75	5449.85	4280.30	782.40
12.5	10.5	8	0.70	0.50	0.86	37.70	44.84	206.2	52.65	739.29	5489.82	4311.69	797.60
12.6	10.6	8	0.70	0.50	0.86	37.70	44.82	208.1	53.06	755.96	5529.74	4343.04	812.90
12.7	10.7	8	0.70	0.50	0.86	37.70	44.79	210.1	53.47	772.76	5569.59	4374.35	828.30
12.8	10.8	8	0.70	0.50	0.86	37.70	44.77	212.1	53.88	789.69	5609.38	4405.60	843.81
12.9	10.9	8	0.70	0.50	0.86	37.70	44.75	214.0	54.29	806.74	5649.11	4436.80	859.42
13.0	11.0	8	0.70	0.50	0.86	37.70	44.72	216.0	54.70	823.93	5688.78	4467.96	875.13
13.1	11.1	8	0.70	0.50	0.86	37.70	44.70	217.9	55.11	841.24	5728.39	4499.07	890.94
13.2	11.2	8	0.70	0.50	0.86	37.70	44.68	219.9	55.53	858.69	5767.94	4530.13	906.86
13.3	11.3	8	0.70	0.50	0.86	37.70	44.65	221.9	55.94	876.26	5807.42	4561.14	922.88
13.4	11.4	8	0.70	0.50	0.86	37.70	44.63	223.8	56.35	893.96	5846.84	4592.10	939.01
13.5	11.5	8	0.70	0.50	0.86	37.70	44.60	225.8	56.76	911.79	5886.19	4623.01	955.24
13.6	11.6	8	0.70	0.50	0.86	37.70	44.58	227.8	57.17	929.75	5925.48	4653.86	971.57

13.7	11.7	8	0.70	0.50	0.86	37.70	44.55	229.7	57.58	947.84	5964.71	4684.67	988.00
13.8	11.8	8	0.70	0.50	0.86	37.70	44.53	231.7	57.99	966.06	6003.87	4715.43	1004.54
13.9	11.9	8	0.70	0.50	0.86	37.70	44.50	233.7	58.40	984.40	6042.97	4746.13	1021.18
14.0	12.0	8	0.70	0.50	0.86	37.70	44.48	235.6	58.81	1002.88	6082.00	4776.79	1037.92
14.1	12.1	8	0.70	0.50	0.86	37.70	44.45	237.6	59.22	1021.48	6120.96	4807.39	1054.77
14.2	12.2	8	0.70	0.50	0.86	37.70	44.43	239.5	59.63	1040.22	6159.86	4837.94	1071.72
14.3	12.3	8	0.70	0.50	0.86	37.70	44.40	241.5	60.04	1059.08	6198.68	4868.44	1088.77
14.4	12.4	8	0.70	0.50	0.86	37.70	44.38	243.5	60.45	1078.07	6237.45	4898.88	1105.93
14.5	12.5	8	0.70	0.50	0.86	37.70	44.35	245.4	60.86	1097.19	6276.14	4929.27	1123.19
14.6	12.6	8	0.70	0.50	0.86	37.70	44.33	247.4	61.27	1116.43	6314.76	4959.60	1140.55
14.7	12.7	8	0.70	0.50	0.86	37.70	44.30	249.4	61.68	1135.81	6353.32	4989.89	1158.01
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	251.3	0.00	1135.81	0.00	0.00	1159.98
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	253.3	0.00	1135.81	0.00	0.00	1161.94
15.0	13.0	10	0.70	0.50	0.90	38.85	49.46	255.3	65.51	1156.39	7235.54	5682.78	1180.37
15.1	13.1	10	0.70	0.50	0.90	38.85	49.43	257.2	65.94	1177.11	7278.43	5716.46	1198.90
15.2	13.2	10	0.70	0.50	0.90	38.85	49.41	259.2	66.36	1197.96	7321.24	5750.09	1217.55
15.3	13.3	10	0.70	0.50	0.90	38.85	49.38	261.1	66.79	1218.94	7363.97	5783.65	1236.30
15.4	13.4	10	0.70	0.50	0.90	38.85	49.35	263.1	67.22	1240.06	7406.62	5817.15	1255.15
15.5	13.5	10	0.70	0.50	0.90	38.85	49.32	265.1	67.65	1261.31	7449.19	5850.58	1274.12
15.6	13.6	10	0.70	0.50	0.90	38.85	49.29	267.0	68.07	1282.69	7491.69	5883.96	1293.19
15.7	13.7	10	0.70	0.50	0.90	38.85	49.26	269.0	68.50	1304.21	7534.10	5917.27	1312.37
15.8	13.8	10	0.70	0.50	0.90	38.85	49.23	271.0	68.93	1325.87	7576.42	5950.51	1331.66
15.9	13.9	10	0.70	0.50	0.90	38.85	49.20	272.9	69.35	1347.66	7618.67	5983.69	1351.05
16.0	14.0	10	0.70	0.50	0.90	38.85	49.16	274.9	69.78	1369.58	7660.84	6016.81	1370.55
16.1	14.1	10	0.70	0.50	0.90	38.85	49.13	276.9	70.21	1391.64	7702.92	6049.86	1390.16
16.2	14.2	10	0.70	0.50	0.90	38.85	49.10	278.8	70.64	1413.83	7744.91	6082.84	1409.88
16.3	14.3	10	0.70	0.50	0.90	38.85	49.07	280.8	71.06	1436.15	7786.83	6115.76	1429.70
16.4	14.4	10	0.70	0.50	0.90	38.85	49.04	282.7	71.49	1458.61	7828.65	6148.61	1449.63
16.5	14.5	10	0.70	0.50	0.90	38.85	49.01	284.7	71.92	1481.21	7870.40	6181.39	1469.67
16.6	14.6	10	0.70	0.50	0.90	38.85	48.98	286.7	72.35	1503.93	7912.05	6214.11	1489.82
16.7	14.7	10	0.70	0.50	0.90	38.85	48.95	288.6	72.77	1526.80	7953.62	6246.76	1510.07
16.8	14.8	10	0.70	0.50	0.90	38.85	48.91	290.6	73.20	1549.79	7995.11	6279.34	1530.43
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1549.79	0.00	0.00	1532.39
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1549.79	0.00	0.00	1534.36

1.2.2.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1180	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.70	0.50	0.70	31.95	24.55	1.3	10.43	2.62	732.75	368.32	3.35
2.2	0.2	2	0.70	0.50	0.70	31.95	24.55	2.5	10.76	5.33	756.18	380.10	6.77
2.3	0.3	2	0.70	0.50	0.70	31.95	24.55	3.8	11.10	8.11	779.60	391.87	10.26
2.4	0.4	2	0.70	0.50	0.70	31.95	24.55	5.0	11.43	10.99	803.02	403.64	13.82
2.5	0.5	2	0.70	0.50	0.70	31.95	24.55	6.3	11.76	13.94	826.45	415.42	17.44
2.6	0.6	2	0.70	0.50	0.70	31.95	24.55	7.5	12.10	16.98	849.87	427.19	21.13
2.7	0.7	2	0.70	0.50	0.70	31.95	24.55	8.8	12.43	20.11	873.29	438.97	24.88
2.8	0.8	2	0.70	0.50	0.70	31.95	24.55	10.1	12.76	23.31	896.72	450.74	28.71
2.9	0.9	2	0.70	0.50	0.70	31.95	24.55	11.3	13.10	26.61	920.14	462.51	32.59
3.0	1.0	3	0.58	0.50	0.40	19.00	3.57	12.6	23.20	32.44	417.95	210.08	38.52
3.1	1.1	3	0.58	0.50	0.40	19.00	3.57	13.8	23.20	38.27	419.78	211.00	44.44
3.2	1.2	3	0.58	0.50	0.40	19.00	3.57	15.1	23.20	44.10	421.61	211.93	50.36
3.3	1.3	3	0.58	0.50	0.40	19.00	3.57	16.3	23.20	49.93	423.45	212.85	56.28
3.4	1.4	3	0.58	0.50	0.40	19.00	3.57	17.6	23.20	55.76	425.28	213.77	62.20
3.5	1.5	3	0.58	0.50	0.40	19.00	3.57	18.8	23.20	61.59	427.11	214.69	68.12
3.6	1.6	3	0.58	0.50	0.40	19.00	3.57	20.1	23.20	67.42	428.95	215.61	74.04
3.7	1.7	3	0.58	0.50	0.40	19.00	3.57	21.4	23.20	73.25	430.78	216.53	79.97
3.8	1.8	3	0.58	0.50	0.40	19.00	3.57	22.6	23.20	79.08	432.61	217.45	85.89
3.9	1.9	3	0.58	0.50	0.40	19.00	3.57	23.9	23.20	84.91	434.45	218.38	91.81
4.0	2.0	3	0.58	0.50	0.40	19.00	3.57	25.1	23.20	90.75	436.28	219.30	97.73
4.1	2.1	3	0.58	0.50	0.40	19.00	3.57	26.4	23.20	96.58	438.11	220.22	103.65
4.2	2.2	3	0.58	0.50	0.40	19.00	3.57	27.6	23.20	102.41	439.94	221.14	109.57

4.3	2.3	3	0.58	0.50	0.40	19.00	3.57	28.9	23.20	108.24	441.78	222.06	115.49
4.4	2.4	4	0.70	0.50	0.00	0.00	0.00	30.2	0.00	108.24	0.00	0.00	116.75
4.5	2.5	4	0.70	0.50	0.00	0.00	0.00	31.4	0.00	108.24	0.00	0.00	118.01
4.6	2.6	4	0.70	0.50	0.00	0.00	0.00	32.7	0.00	108.24	0.00	0.00	119.26
4.7	2.7	4	0.70	0.50	0.00	0.00	0.00	33.9	0.00	108.24	0.00	0.00	120.52
4.8	2.8	4	0.70	0.50	0.00	0.00	0.00	35.2	0.00	108.24	0.00	0.00	121.78
4.9	2.9	4	0.70	0.50	0.00	0.00	0.00	36.4	0.00	108.24	0.00	0.00	123.03
5.0	3.0	4	0.70	0.50	0.00	0.00	0.00	37.7	0.00	108.24	0.00	0.00	124.29
5.1	3.1	4	0.70	0.50	0.00	0.00	0.00	39.0	0.00	108.24	0.00	0.00	125.55
5.2	3.2	4	0.70	0.50	0.00	0.00	0.00	40.2	0.00	108.24	0.00	0.00	126.80
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	108.24	0.00	0.00	128.06
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	108.24	0.00	0.00	129.32
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	108.24	0.00	0.00	130.57
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	108.24	0.00	0.00	131.83
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	108.24	0.00	0.00	133.09
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	108.24	0.00	0.00	134.34
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	108.24	0.00	0.00	135.60
6.0	4.0	5	0.50	0.50	0.40	19.00	3.57	50.3	25.00	114.52	564.57	283.78	141.88
6.1	4.1	5	0.50	0.50	0.40	19.00	3.57	51.5	25.00	120.80	566.40	284.71	148.17
6.2	4.2	5	0.50	0.50	0.40	19.00	3.57	52.8	25.00	127.09	568.24	285.63	154.45
6.3	4.3	5	0.50	0.50	0.40	19.00	3.57	54.0	25.00	133.37	570.07	286.55	160.73
6.4	4.4	5	0.50	0.50	0.40	19.00	3.57	55.3	25.00	139.65	571.90	287.47	167.01
6.5	4.5	5	0.50	0.50	0.40	19.00	3.57	56.5	25.00	145.94	573.74	288.39	173.30
6.6	4.6	5	0.50	0.50	0.40	19.00	3.57	57.8	25.00	152.22	575.57	289.31	179.58
6.7	4.7	5	0.50	0.50	0.40	19.00	3.57	59.1	25.00	158.50	577.40	290.23	185.86
6.8	4.8	5	0.50	0.50	0.40	19.00	3.57	60.3	25.00	164.79	579.23	291.15	192.15
6.9	4.9	5	0.50	0.50	0.40	19.00	3.57	61.6	25.00	171.07	581.07	292.08	198.43
7.0	5.0	5	0.50	0.50	0.40	19.00	3.57	62.8	25.00	177.35	582.90	293.00	204.71
7.1	5.1	5	0.50	0.50	0.40	19.00	3.57	64.1	25.00	183.64	584.73	293.92	211.00
7.2	5.2	5	0.50	0.50	0.40	19.00	3.57	65.3	25.00	189.92	586.57	294.84	217.28
7.3	5.3	5	0.50	0.50	0.40	19.00	3.57	66.6	25.00	196.20	588.40	295.76	223.56
7.4	5.4	5	0.50	0.50	0.40	19.00	3.57	67.9	25.00	202.49	590.23	296.68	229.85
7.5	5.5	5	0.50	0.50	0.40	19.00	3.57	69.1	25.00	208.77	592.07	297.60	236.13
7.6	5.6	5	0.50	0.50	0.40	19.00	3.57	70.4	25.00	215.05	593.90	298.53	242.41
7.7	5.7	5	0.50	0.50	0.40	19.00	3.57	71.6	25.00	221.33	595.73	299.45	248.70
7.8	5.8	5	0.50	0.50	0.40	19.00	3.57	72.9	25.00	227.62	597.56	300.37	254.98
7.9	5.9	5	0.50	0.50	0.40	19.00	3.57	74.1	25.00	233.90	599.40	301.29	261.26
8.0	6.0	5	0.50	0.50	0.40	19.00	3.57	75.4	25.00	240.18	601.23	302.21	267.55
8.1	6.1	5	0.50	0.50	0.40	19.00	3.57	76.7	25.00	246.47	603.06	303.13	273.83
8.2	6.2	5	0.50	0.50	0.40	19.00	3.57	77.9	25.00	252.75	604.90	304.05	280.11
8.3	6.3	5	0.50	0.50	0.40	19.00	3.57	79.2	25.00	259.03	606.73	304.98	286.40
8.4	6.4	5	0.50	0.50	0.40	19.00	3.57	80.4	25.00	265.32	608.56	305.90	292.68
8.5	6.5	5	0.50	0.50	0.40	19.00	3.56	81.7	25.00	271.60	610.40	306.82	298.96
8.6	6.6	5	0.50	0.50	0.40	19.00	3.56	82.9	25.00	277.88	612.23	307.74	305.24
8.7	6.7	5	0.50	0.50	0.40	19.00	3.56	84.2	25.00	284.17	614.06	308.66	311.53
8.8	6.8	5	0.50	0.50	0.40	19.00	3.56	85.5	25.00	290.45	615.89	309.58	317.81
8.9	6.9	5	0.50	0.50	0.40	19.00	3.55	86.7	25.00	296.73	617.73	310.50	324.09

9.0	7.0	5	0.50	0.50	0.40	19.00	3.55	88.0	25.00	303.02	619.56	311.42	330.38
9.1	7.1	5	0.50	0.50	0.40	19.00	3.55	89.2	25.00	309.30	621.39	312.35	336.66
9.2	7.2	5	0.50	0.50	0.40	19.00	3.54	90.5	25.00	315.58	623.23	313.27	342.94
9.3	7.3	5	0.50	0.50	0.40	19.00	3.54	91.7	25.00	321.87	625.06	314.19	349.23
9.4	7.4	5	0.50	0.50	0.40	19.00	3.54	93.0	25.00	328.15	626.89	315.11	355.51
9.5	7.5	5	0.50	0.50	0.40	19.00	3.53	94.2	25.00	334.43	628.73	316.03	361.79
9.6	7.6	5	0.50	0.50	0.40	19.00	3.53	95.5	25.00	340.72	630.56	316.95	368.08
9.7	7.7	5	0.50	0.50	0.40	19.00	3.53	96.8	25.00	347.00	632.39	317.87	374.36
9.8	7.8	5	0.50	0.50	0.40	19.00	3.52	98.0	25.00	353.28	634.22	318.80	380.64
9.9	7.9	5	0.50	0.50	0.40	19.00	3.52	99.3	25.00	359.56	636.06	319.72	386.93
10.0	8.0	5	0.50	0.50	0.40	19.00	3.52	100.5	25.00	365.85	637.89	320.64	393.21
10.1	8.1	5	0.50	0.50	0.40	19.00	3.51	101.8	25.00	372.13	639.72	321.56	399.49
10.2	8.2	5	0.50	0.50	0.40	19.00	3.51	103.0	25.00	378.41	641.56	322.48	405.78
10.3	8.3	5	0.50	0.50	0.40	19.00	3.51	104.3	25.00	384.70	643.39	323.40	412.06
10.4	8.4	5	0.50	0.50	0.40	19.00	3.50	105.6	25.00	390.98	645.22	324.32	418.34
10.5	8.5	5	0.50	0.50	0.40	19.00	3.50	106.8	25.00	397.26	647.06	325.25	424.63
10.6	8.6	5	0.50	0.50	0.40	19.00	3.50	108.1	25.00	403.55	648.89	326.17	430.91
10.7	8.7	5	0.50	0.50	0.40	19.00	3.49	109.3	25.00	409.83	650.72	327.09	437.19
10.8	8.8	5	0.50	0.50	0.40	19.00	3.49	110.6	25.00	416.11	652.55	328.01	443.47
10.9	8.9	5	0.50	0.50	0.40	19.00	3.49	111.8	25.00	422.40	654.39	328.93	449.76
11.0	9.0	5	0.50	0.50	0.40	19.00	3.48	113.1	25.00	428.68	656.22	329.85	456.04
11.1	9.1	6	0.70	0.50	0.86	37.70	44.63	114.4	46.91	440.47	4868.30	2447.07	466.73
11.2	9.2	6	0.70	0.50	0.86	37.70	44.60	115.6	47.32	452.36	4907.53	2466.79	477.50
11.3	9.3	6	0.70	0.50	0.86	37.70	44.57	116.9	47.73	464.36	4946.67	2486.47	488.35
11.4	9.4	6	0.70	0.50	0.86	37.70	44.54	118.1	48.14	476.46	4985.74	2506.10	499.29
11.5	9.5	6	0.70	0.50	0.86	37.70	44.51	119.4	48.55	488.66	5024.72	2525.70	510.31
11.6	9.6	6	0.70	0.50	0.86	37.70	44.48	120.6	48.96	500.96	5063.62	2545.25	521.41
11.7	9.7	7	0.70	0.50	0.00	0.00	0.00	121.9	0.00	500.96	0.00	0.00	522.67
11.8	9.8	7	0.70	0.50	0.00	0.00	0.00	123.2	0.00	500.96	0.00	0.00	523.92
11.9	9.9	8	0.70	0.50	0.86	37.70	44.38	124.4	50.19	513.58	5179.80	2603.65	535.27
12.0	10.0	8	0.70	0.50	0.86	37.70	44.35	125.7	50.60	526.30	5218.36	2623.04	546.70
12.1	10.1	8	0.70	0.50	0.86	37.70	44.32	126.9	51.01	539.12	5256.83	2642.37	558.21
12.2	10.2	8	0.70	0.50	0.86	37.70	44.29	128.2	51.42	552.04	5295.22	2661.67	569.81
12.3	10.3	8	0.70	0.50	0.86	37.70	44.25	129.4	51.83	565.07	5333.52	2680.92	581.49
12.4	10.4	8	0.70	0.50	0.86	37.70	44.22	130.7	52.24	578.20	5371.72	2700.12	593.25
12.5	10.5	8	0.70	0.50	0.86	37.70	44.19	131.9	52.65	591.43	5409.84	2719.28	605.09
12.6	10.6	8	0.70	0.50	0.86	37.70	44.15	133.2	53.06	604.77	5447.87	2738.40	617.02
12.7	10.7	8	0.70	0.50	0.86	37.70	44.12	134.5	53.47	618.21	5485.81	2757.47	629.03
12.8	10.8	8	0.70	0.50	0.86	37.70	44.09	135.7	53.88	631.75	5523.66	2776.49	641.12
12.9	10.9	8	0.70	0.50	0.86	37.70	44.05	137.0	54.29	645.40	5561.41	2795.47	653.29
13.0	11.0	8	0.70	0.50	0.86	37.70	44.02	138.2	54.70	659.14	5599.07	2814.40	665.55
13.1	11.1	8	0.70	0.50	0.86	37.70	43.98	139.5	55.11	673.00	5636.64	2833.28	677.88
13.2	11.2	8	0.70	0.50	0.86	37.70	43.95	140.7	55.53	686.95	5674.11	2852.12	690.30
13.3	11.3	8	0.70	0.50	0.86	37.70	43.91	142.0	55.94	701.01	5711.49	2870.91	702.81
13.4	11.4	8	0.70	0.50	0.86	37.70	43.88	143.3	56.35	715.17	5748.78	2889.65	715.39
13.5	11.5	8	0.70	0.50	0.86	37.70	43.84	144.5	56.76	729.43	5785.96	2908.34	728.06
13.6	11.6	8	0.70	0.50	0.86	37.70	43.81	145.8	57.17	743.80	5823.05	2926.99	740.81

13.7	11.7	8	0.70	0.50	0.86	37.70	43.77	147.0	57.58	758.27	5860.04	2945.58	753.64
13.8	11.8	8	0.70	0.50	0.86	37.70	43.74	148.3	57.99	772.85	5896.94	2964.12	766.56
13.9	11.9	8	0.70	0.50	0.86	37.70	43.70	149.5	58.40	787.52	5933.73	2982.62	779.56
14.0	12.0	8	0.70	0.50	0.86	37.70	43.66	150.8	58.81	802.30	5970.43	3001.06	792.64
14.1	12.1	8	0.70	0.50	0.86	37.70	43.63	152.1	59.22	817.19	6007.02	3019.46	805.80
14.2	12.2	8	0.70	0.50	0.86	37.70	43.59	153.3	59.63	832.17	6043.51	3037.80	819.05
14.3	12.3	8	0.70	0.50	0.86	37.70	43.55	154.6	60.04	847.26	6079.90	3056.09	832.38
14.4	12.4	8	0.70	0.50	0.86	37.70	43.51	155.8	60.45	862.45	6116.19	3074.33	845.79
14.5	12.5	8	0.70	0.50	0.86	37.70	43.48	157.1	60.86	877.75	6152.37	3092.52	859.28
14.6	12.6	8	0.70	0.50	0.86	37.70	43.44	158.3	61.27	893.15	6188.45	3110.66	872.85
14.7	12.7	8	0.70	0.50	0.86	37.70	43.40	159.6	61.68	908.65	6224.43	3128.74	886.51
14.8	12.8	9	0.70	0.50	0.00	0.00	0.00	160.8	0.00	908.65	0.00	0.00	887.77
14.9	12.9	9	0.70	0.50	0.00	0.00	0.00	162.1	0.00	908.65	0.00	0.00	889.03
15.0	13.0	10	0.70	0.50	0.90	38.85	48.47	163.4	65.51	925.11	7089.94	3563.79	903.45
15.1	13.1	10	0.70	0.50	0.90	38.85	48.44	164.6	65.94	941.69	7132.46	3585.17	917.97
15.2	13.2	10	0.70	0.50	0.90	38.85	48.42	165.9	66.36	958.36	7174.94	3606.52	932.57
15.3	13.3	10	0.70	0.50	0.90	38.85	48.39	167.1	66.79	975.15	7217.36	3627.84	947.25
15.4	13.4	10	0.70	0.50	0.90	38.85	48.37	168.4	67.22	992.05	7259.74	3649.14	962.03
15.5	13.5	10	0.70	0.50	0.90	38.85	48.34	169.6	67.65	1009.05	7302.08	3670.42	976.88
15.6	13.6	10	0.70	0.50	0.90	38.85	48.32	170.9	68.07	1026.16	7344.36	3691.68	991.83
15.7	13.7	10	0.70	0.50	0.90	38.85	48.29	172.2	68.50	1043.37	7386.61	3712.91	1006.86
15.8	13.8	10	0.70	0.50	0.90	38.85	48.27	173.4	68.93	1060.69	7428.80	3734.12	1021.97
15.9	13.9	10	0.70	0.50	0.90	38.85	48.24	174.7	69.35	1078.13	7470.95	3755.31	1037.17
16.0	14.0	10	0.70	0.50	0.90	38.85	48.22	175.9	69.78	1095.66	7513.05	3776.47	1052.46
16.1	14.1	10	0.70	0.50	0.90	38.85	48.19	177.2	70.21	1113.31	7555.11	3797.61	1067.83
16.2	14.2	10	0.70	0.50	0.90	38.85	48.17	178.4	70.64	1131.06	7597.12	3818.73	1083.29
16.3	14.3	10	0.70	0.50	0.90	38.85	48.14	179.7	71.06	1148.92	7639.09	3839.83	1098.84
16.4	14.4	10	0.70	0.50	0.90	38.85	48.12	181.0	71.49	1166.89	7681.01	3860.90	1114.47
16.5	14.5	10	0.70	0.50	0.90	38.85	48.09	182.2	71.92	1184.96	7722.88	3881.95	1130.18
16.6	14.6	10	0.70	0.50	0.90	38.85	48.07	183.5	72.35	1203.15	7764.71	3902.97	1145.99
16.7	14.7	10	0.70	0.50	0.90	38.85	48.04	184.7	72.77	1221.44	7806.50	3923.97	1161.88
16.8	14.8	10	0.70	0.50	0.90	38.85	48.02	186.0	73.20	1239.83	7848.23	3944.95	1177.85
16.9	14.9	11	0.70	0.50	0.00	0.00	0.00	187.2	0.00	1239.83	0.00	0.00	1179.11
17.0	15.0	11	0.70	0.50	0.00	0.00	0.00	188.5	0.00	1239.83	0.00	0.00	1180.36

1.2.3 Calcolo del carico limite con riferimento alla prova CPT1_2012

1.2.3.1 Condizioni statiche

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.1**	**19.35**	**40**		0.70	0.50	0.84
2	**1.1**	**2.5**	**18.33**	**22**	**86**	0.35	0.50	0.40
3	**2.5**	**3.6**	**19.35**	**40**		0.70	0.50	0.84
4	**3.6**	**3.8**	**19.35**	**36**		0.70	0.50	0.73
5	**3.8**	**4.0**	**19.35**	**40**		0.70	0.50	0.84
6	**4.0**	**5.0**	**18.33**	**22**	**40**	0.58	0.50	0.40
7	**5.0**	**5.5**	**19.35**	**36**		0.70	0.50	0.73
8	**5.5**	**10.0**	**18.33**	**22**	**34**	0.63	0.50	0.40
9	**10.0**	**10.4**	**19.35**	**40**		0.70	0.50	0.83
10	**10.4**	**11.2**	**19.35**	**37**		0.70	0.50	0.76
11	**11.2**	**30.0**	**19.35**	**41**		0.70	0.50	0.86

1.2.3.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	2120	1973

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.8	30.10	11.35	813.62	920.18	11.91	5.82	2.20	102.82	116.29	4.58
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	5.7	30.10	22.69	815.45	922.25	23.81	5.99	4.46	105.86	119.73	9.22
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	8.5	30.10	34.04	817.28	924.32	35.72	6.17	6.78	108.90	123.16	13.91
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	11.3	30.10	45.39	819.11	926.40	47.62	6.34	9.17	111.94	126.60	18.65
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	14.1	30.10	56.74	820.95	928.47	59.53	6.51	11.62	114.98	130.04	23.44
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	17.0	13.98	62.01	1422.45	1608.75	66.57	13.98	16.90	1422.45	1608.75	30.48
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	19.8	14.39	67.43	1463.34	1654.99	73.74	14.39	22.32	1463.34	1654.99	37.65
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	22.6	14.79	73.01	1504.23	1701.24	81.03	14.79	27.90	1504.23	1701.24	44.94
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	25.4	15.19	78.74	1545.12	1747.49	88.44	15.19	33.62	1545.12	1747.49	52.35
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	28.3	15.59	84.61	1586.01	1793.73	95.97	15.59	39.50	1586.01	1793.73	59.88
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	31.1	16.00	90.64	1626.90	1839.98	103.62	16.00	45.53	1626.90	1839.98	67.53
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	33.9	16.40	96.83	1667.79	1886.23	111.39	16.40	51.71	1667.79	1886.23	75.30
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	36.8	16.80	103.16	1708.68	1932.47	119.28	16.80	58.05	1708.68	1932.47	83.19
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	39.6	17.20	109.64	1749.57	1978.72	127.30	17.20	64.53	1749.57	1978.72	91.21
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	42.4	17.60	116.28	1790.47	2024.97	135.44	17.60	71.17	1790.47	2024.97	99.35
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	45.2	18.01	123.07	1831.36	2071.22	143.69	18.01	77.95	1831.36	2071.22	107.60
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	48.1	15.93	129.07	1222.88	1383.04	151.32	15.93	83.96	1222.88	1383.04	115.23
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	50.9	16.27	135.21	1249.59	1413.25	159.06	16.27	90.09	1249.59	1413.25	122.97
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	53.7	19.21	142.45	1954.03	2209.96	167.68	19.21	97.34	1954.03	2209.96	131.59
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	56.5	19.61	149.84	1994.92	2256.20	176.42	19.61	104.73	1994.92	2256.20	140.33
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	59.4	23.20	158.59	437.81	495.15	186.25	9.57	108.34	169.07	191.21	146.05
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	62.2	23.20	167.34	439.64	497.22	196.07	9.75	112.01	172.10	194.65	151.81

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	65.0	23.20	176.08	441.47	499.29	205.90	9.92	115.75	175.14	198.08	157.63
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	67.9	23.20	184.83	443.30	501.37	215.72	10.09	119.56	178.18	201.52	163.50
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	70.7	23.20	193.57	445.14	503.44	225.54	10.26	123.43	181.22	204.96	169.43
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	73.5	23.20	202.32	446.97	505.51	235.37	10.43	127.36	184.26	208.40	175.40
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	76.3	23.20	211.07	448.80	507.58	245.19	10.61	131.36	187.30	211.83	181.43
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	79.2	23.20	219.81	450.64	509.66	255.02	10.78	135.42	190.34	215.27	187.51
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	82.0	23.20	228.56	452.47	511.73	264.84	10.95	139.55	193.38	218.71	193.64
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	84.8	23.20	237.30	454.30	513.80	274.67	11.12	143.74	196.42	222.14	199.82
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	87.7	20.42	245.00	1568.24	1773.64	283.65	20.42	151.44	1568.24	1773.64	208.81
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	90.5	20.77	252.84	1594.95	1803.85	292.75	20.77	159.27	1594.95	1803.85	217.90
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	93.3	21.12	260.80	1621.66	1834.05	301.94	21.12	167.24	1621.66	1834.05	227.09
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	96.1	21.47	268.89	1648.37	1864.26	311.24	21.47	175.33	1648.37	1864.26	236.40
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	99.0	21.82	277.11	1675.07	1894.46	320.65	21.82	183.55	1675.07	1894.46	245.80
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	101.8	21.35	285.16	411.81	465.75	329.92	12.26	188.17	216.47	244.83	252.33
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	104.6	21.35	293.21	413.64	467.82	339.19	12.43	192.86	219.51	248.26	258.90
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	107.4	21.35	301.26	415.48	469.89	348.45	12.60	197.61	222.55	251.70	265.53
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	110.3	21.35	309.31	417.31	471.97	357.72	12.78	202.43	225.59	255.14	272.21
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	113.1	21.35	317.36	419.14	474.04	366.99	12.95	207.31	228.63	258.58	278.95
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	115.9	21.35	325.41	420.98	476.11	376.25	13.12	212.26	231.67	262.01	285.73
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	118.8	21.35	333.46	422.81	478.18	385.52	13.29	217.27	234.71	265.45	292.57
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	121.6	21.35	341.51	424.64	480.26	394.79	13.46	222.34	237.75	268.89	299.45
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	124.4	21.35	349.56	426.47	482.33	404.05	13.64	227.48	240.79	272.33	306.39
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	127.2	21.35	357.61	428.31	484.40	413.32	13.81	232.69	243.83	275.76	313.39
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	130.1	21.35	365.66	430.14	486.48	422.59	13.98	237.96	246.87	279.20	320.43
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	132.9	21.35	373.71	431.97	488.55	431.86	14.15	243.29	249.91	282.64	327.52
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	135.7	21.35	381.76	433.81	490.62	441.12	14.32	248.69	252.95	286.07	334.67
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	138.5	21.35	389.81	435.64	492.70	450.39	14.50	254.16	255.98	289.51	341.87
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	397.86	437.47	494.77	459.66	14.67	259.69	259.02	292.95	349.12
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	144.2	21.35	405.91	439.31	496.84	468.92	14.84	265.28	262.06	296.39	356.43
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	147.0	21.35	413.96	441.14	498.92	478.19	15.01	270.94	265.10	299.82	363.78
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	149.9	21.35	422.01	442.97	500.99	487.46	15.18	276.67	268.14	303.26	371.19
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	152.7	21.35	430.05	444.80	503.06	496.73	15.36	282.46	271.18	306.70	378.65
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	155.5	21.35	438.10	446.64	505.13	505.99	15.53	288.31	274.22	310.14	386.16
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	158.3	21.35	446.15	448.47	507.21	515.26	15.70	294.23	277.26	313.57	393.72
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	161.2	21.35	454.20	450.30	509.28	524.53	15.87	300.22	280.30	317.01	401.34
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	164.0	21.35	462.25	452.14	511.35	533.79	16.05	306.26	283.34	320.45	409.00
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	166.8	21.35	470.30	453.97	513.43	543.06	16.22	312.38	286.38	323.89	416.72
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	169.6	21.35	478.35	455.80	515.50	552.33	16.39	318.56	289.42	327.32	424.49
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	172.5	21.35	486.40	457.64	517.57	561.59	16.56	324.80	292.46	330.76	432.31
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	175.3	21.35	494.45	459.47	519.65	570.86	16.73	331.11	295.50	334.20	440.19
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	178.1	21.35	502.50	461.30	521.72	580.13	16.91	337.48	298.53	337.63	448.11
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	181.0	21.35	510.55	463.13	523.79	589.40	17.08	343.92	301.57	341.07	456.09
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	183.8	21.35	518.60	464.97	525.87	598.66	17.25	350.42	304.61	344.51	464.12
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	186.6	21.35	526.65	466.80	527.94	607.93	17.42	356.99	307.65	347.95	472.20
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	189.4	21.35	534.70	468.63	530.01	617.20	17.59	363.63	310.69	351.38	480.34
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	192.3	21.35	542.75	470.47	532.08	626.46	17.77	370.32	313.73	354.82	488.52
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	195.1	21.35	550.80	472.30	534.16	635.73	17.94	377.09	316.77	358.26	496.76

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	197.9	21.35	558.85	474.13	536.23	645.00	18.11	383.91	319.81	361.70	505.05
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	200.7	21.35	566.90	475.97	538.30	654.27	18.28	390.81	322.85	365.13	513.39
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	203.6	21.35	574.95	477.80	540.38	663.53	18.46	397.76	325.89	368.57	521.79
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	206.4	21.35	583.00	479.63	542.45	672.80	18.63	404.79	328.93	372.01	530.23
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	209.2	21.35	591.05	481.46	544.52	682.07	18.80	411.87	331.97	375.45	538.73
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	212.1	21.35	599.09	483.30	546.60	691.33	18.97	419.03	335.01	378.88	547.28
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	214.9	21.35	607.14	485.13	548.67	700.60	19.14	426.24	338.05	382.32	555.88
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	217.7	21.35	615.19	486.96	550.74	709.87	19.32	433.52	341.08	385.76	564.53
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	220.5	21.35	623.24	488.80	552.82	719.13	19.49	440.87	344.12	389.19	573.24
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	223.4	21.35	631.29	490.63	554.89	728.40	19.66	448.28	347.16	392.63	581.99
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	226.2	21.35	639.34	492.46	556.96	737.67	19.83	455.76	350.20	396.07	590.80
10.1	8.1	9	0.70	0.50	0.83	36.55	40.45	229.0	40.93	654.77	4009.66	4534.81	752.84	40.93	471.19	4009.66	4534.81	605.97
10.2	8.2	9	0.70	0.50	0.83	36.55	40.45	231.8	41.32	670.35	4048.24	4578.46	768.13	41.32	486.77	4048.24	4578.46	621.26
10.3	8.3	9	0.70	0.50	0.83	36.55	40.45	234.7	41.72	686.08	4086.83	4622.10	783.54	41.72	502.49	4086.83	4622.10	636.67
10.4	8.4	9	0.70	0.50	0.83	36.55	40.45	237.5	42.11	701.95	4125.42	4665.74	799.07	42.11	518.37	4125.42	4665.74	652.20
10.5	8.5	10	0.70	0.50	0.76	34.25	31.78	240.3	39.14	716.71	3271.49	3699.97	813.70	39.14	533.13	3271.49	3699.97	666.83
10.6	8.6	10	0.70	0.50	0.76	34.25	31.78	243.2	39.50	731.60	3301.81	3734.26	828.44	39.50	548.02	3301.81	3734.26	681.57
10.7	8.7	10	0.70	0.50	0.76	34.25	31.78	246.0	39.86	746.63	3332.13	3768.55	843.29	39.86	563.05	3332.13	3768.55	696.42
10.8	8.8	10	0.70	0.50	0.76	34.25	31.78	248.8	40.23	761.79	3362.45	3802.84	858.25	40.23	578.21	3362.45	3802.84	711.38
10.9	8.9	10	0.70	0.50	0.76	34.25	31.78	251.6	40.59	777.10	3392.76	3837.12	873.32	40.59	593.51	3392.76	3837.12	726.45
11.0	9.0	10	0.70	0.50	0.76	34.25	31.78	254.5	40.95	792.54	3423.08	3871.41	888.50	40.95	608.95	3423.08	3871.41	741.63
11.1	9.1	10	0.70	0.50	0.76	34.25	31.78	257.3	41.32	808.11	3453.40	3905.70	903.79	41.32	624.53	3453.40	3905.70	756.92
11.2	9.2	10	0.70	0.50	0.76	34.25	31.78	260.1	41.68	823.82	3483.72	3939.99	919.18	41.68	640.24	3483.72	3939.99	772.32
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	47.55	841.75	5017.74	5674.93	936.35	47.55	658.17	5017.74	5674.93	789.49
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	47.96	859.83	5061.03	5723.89	953.65	47.96	676.25	5061.03	5723.89	806.78
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	48.37	878.07	5104.32	5772.85	971.06	48.37	694.49	5104.32	5772.85	824.20
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	48.79	896.46	5147.61	5821.81	988.60	48.79	712.88	5147.61	5821.81	841.74
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	49.20	915.01	5189.00	5868.62	1006.27	49.20	731.42	5189.00	5868.62	859.40
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	49.61	933.71	5230.34	5915.37	1024.06	49.61	750.13	5230.34	5915.37	877.19
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.02	952.56	5271.64	5962.08	1041.97	50.02	768.98	5271.64	5962.08	895.10
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	50.43	971.58	5312.89	6008.74	1060.00	50.43	787.99	5312.89	6008.74	913.14
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	50.84	990.74	5354.11	6055.35	1078.16	50.84	807.16	5354.11	6055.35	931.30
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	51.25	1010.06	5395.28	6101.92	1096.45	51.25	826.48	5395.28	6101.92	949.58
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	51.66	1029.53	5436.41	6148.43	1114.85	51.66	845.95	5436.41	6148.43	967.99
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.07	1049.16	5477.49	6194.90	1133.38	52.07	865.58	5477.49	6194.90	986.52
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	52.48	1068.95	5518.54	6241.32	1152.04	52.48	885.36	5518.54	6241.32	1005.17
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	52.89	1088.88	5559.53	6287.68	1170.82	52.89	905.30	5559.53	6287.68	1023.95
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	53.30	1108.98	5600.49	6334.00	1189.72	53.30	925.39	5600.49	6334.00	1042.85
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	53.71	1129.23	5641.40	6380.27	1208.74	53.71	945.64	5641.40	6380.27	1061.88
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	54.12	1149.63	5682.26	6426.49	1227.89	54.12	966.04	5682.26	6426.49	1081.03
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	54.53	1170.18	5723.08	6472.65	1247.17	54.53	986.60	5723.08	6472.65	1100.30
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	54.94	1190.90	5763.86	6518.77	1266.56	54.94	1007.31	5763.86	6518.77	1119.70
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	55.35	1211.76	5804.58	6564.83	1286.08	55.35	1028.18	5804.58	6564.83	1139.22
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	55.76	1232.78	5845.27	6610.84	1305.73	55.76	1049.20	5845.27	6610.84	1158.86
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	56.17	1253.96	5885.90	6656.80	1325.50	56.17	1070.38	5885.90	6656.80	1178.63
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	56.58	1275.29	5926.50	6702.71	1345.39	56.58	1091.71	5926.50	6702.71	1198.52
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	56.99	1296.78	5967.04	6748.56	1365.40	56.99	1113.19	5967.04	6748.56	1218.54

13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	57.40	1318.41	6007.54	6794.36	1385.54	57.40	1134.83	6007.54	6794.36	1238.67
13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	57.81	1340.21	6047.99	6840.11	1405.80	57.81	1156.63	6047.99	6840.11	1258.94
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	58.22	1362.16	6088.39	6885.81	1426.19	58.22	1178.57	6088.39	6885.81	1279.32
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	58.63	1384.26	6128.75	6931.45	1446.70	58.63	1200.68	6128.75	6931.45	1299.83
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.04	1406.52	6169.05	6977.03	1467.34	59.04	1222.94	6169.05	6977.03	1320.47
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	59.45	1428.93	6209.31	7022.57	1488.09	59.45	1245.35	6209.31	7022.57	1341.23
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	59.86	1451.50	6249.52	7068.04	1508.98	59.86	1267.92	6249.52	7068.04	1362.11
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	60.27	1474.22	6289.68	7113.47	1529.98	60.27	1290.64	6289.68	7113.47	1383.11
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	60.68	1497.10	6329.80	7158.83	1551.11	60.68	1313.52	6329.80	7158.83	1404.24
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.09	1520.13	6369.86	7204.14	1572.36	61.09	1336.55	6369.86	7204.14	1425.50
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	61.50	1543.32	6409.87	7249.40	1593.74	61.50	1359.74	6409.87	7249.40	1446.87
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	61.91	1566.66	6449.84	7294.59	1615.24	61.91	1383.08	6449.84	7294.59	1468.37
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.32	1590.16	6489.75	7339.73	1636.86	62.32	1406.57	6489.75	7339.73	1490.00
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	62.73	1613.81	6529.61	7384.82	1658.61	62.73	1430.22	6529.61	7384.82	1511.74
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.15	1637.61	6569.43	7429.85	1680.48	63.15	1454.03	6569.43	7429.85	1533.62
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	63.56	1661.57	6609.19	7474.81	1702.48	63.56	1477.99	6609.19	7474.81	1555.61
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	63.97	1685.69	6648.90	7519.72	1724.60	63.97	1502.10	6648.90	7519.72	1577.73
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.38	1709.96	6688.55	7564.58	1746.84	64.38	1526.37	6688.55	7564.58	1599.97
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	64.79	1734.38	6728.16	7609.37	1769.21	64.79	1550.80	6728.16	7609.37	1622.34
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.20	1758.96	6767.71	7654.10	1791.70	65.20	1575.37	6767.71	7654.10	1644.83
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	65.61	1783.69	6807.22	7698.78	1814.31	65.61	1600.11	6807.22	7698.78	1667.44
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.02	1808.58	6846.66	7743.39	1837.05	66.02	1625.00	6846.66	7743.39	1690.18
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.43	1833.62	6886.06	7787.95	1859.91	66.43	1650.04	6886.06	7787.95	1713.04
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	66.84	1858.82	6925.40	7832.44	1882.90	66.84	1675.24	6925.40	7832.44	1736.03
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.25	1884.17	6964.69	7876.88	1906.00	67.25	1700.59	6964.69	7876.88	1759.14
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	67.66	1909.68	7003.92	7921.25	1929.24	67.66	1726.09	7003.92	7921.25	1782.37
16.3	14.3	11	0.70	0.50	0.86	37.70	44.50	404.3	68.07	1935.34	7043.10	7965.56	1952.59	68.07	1751.75	7043.10	7965.56	1805.73
16.4	14.4	11	0.70	0.50	0.86	37.70	44.48	407.2	68.48	1961.15	7082.23	8009.81	1976.07	68.48	1777.57	7082.23	8009.81	1829.21
16.5	14.5	11	0.70	0.50	0.86	37.70	44.46	410.0	68.89	1987.12	7121.30	8054.00	1999.68	68.89	1803.54	7121.30	8054.00	1852.81
16.6	14.6	11	0.70	0.50	0.86	37.70	44.44	412.8	69.30	2013.25	7160.32	8098.13	2023.41	69.30	1829.67	7160.32	8098.13	1876.54
16.7	14.7	11	0.70	0.50	0.86	37.70	44.42	415.6	69.71	2039.53	7199.28	8142.19	2047.26	69.71	1855.95	7199.28	8142.19	1900.39
16.8	14.8	11	0.70	0.50	0.86	37.70	44.39	418.5	70.12	2065.96	7238.18	8186.19	2071.23	70.12	1882.38	7238.18	8186.19	1924.37
16.9	14.9	11	0.70	0.50	0.86	37.70	44.37	421.3	70.53	2092.55	7277.03	8230.12	2095.33	70.53	1908.97	7277.03	8230.12	1948.46
17.0	15.0	11	0.70	0.50	0.86	37.70	44.35	424.1	70.94	2119.30	7315.82	8274.00	2119.55	70.94	1935.71	7315.82	8274.00	1972.69

1.2.3.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1707	1585

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.0	30.10	9.46	813.62	639.01	9.53	5.82	1.83	102.82	80.76	3.43
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	3.9	30.10	18.91	815.45	640.45	19.06	5.99	3.71	105.86	83.14	6.90
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	5.9	30.10	28.37	817.28	641.89	28.59	6.17	5.65	108.90	85.53	10.41
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	7.9	30.10	37.82	819.11	643.33	38.11	6.34	7.64	111.94	87.92	13.97
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	9.8	30.10	47.28	820.95	644.77	47.64	6.51	9.69	114.98	90.30	17.57
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	11.8	13.98	51.67	1422.45	1117.19	53.12	13.98	14.08	1422.45	1117.19	23.05
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	13.7	14.39	56.19	1463.34	1149.30	58.70	14.39	18.60	1463.34	1149.30	28.62
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	15.7	14.79	60.84	1504.23	1181.42	64.38	14.79	23.25	1504.23	1181.42	34.31
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	17.7	15.19	65.61	1545.12	1213.53	70.16	15.19	28.02	1545.12	1213.53	40.09
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	19.6	15.59	70.51	1586.01	1245.65	76.04	15.59	32.92	1586.01	1245.65	45.97
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	21.6	16.00	75.54	1626.90	1277.76	82.03	16.00	37.94	1626.90	1277.76	51.95
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	23.6	16.40	80.69	1667.79	1309.88	88.11	16.40	43.09	1667.79	1309.88	58.04
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	25.5	16.80	85.97	1708.68	1342.00	94.30	16.80	48.37	1708.68	1342.00	64.22
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	27.5	17.20	91.37	1749.57	1374.11	100.58	17.20	53.78	1749.57	1374.11	70.51
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	29.5	17.60	96.90	1790.47	1406.23	106.97	17.60	59.31	1790.47	1406.23	76.90
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	31.4	18.01	102.56	1831.36	1438.34	113.46	18.01	64.96	1831.36	1438.34	83.39
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	33.4	15.93	107.56	1222.88	960.45	119.43	15.93	69.97	1222.88	960.45	89.35
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	35.3	16.27	112.67	1249.59	981.42	125.48	16.27	75.08	1249.59	981.42	95.41
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	37.3	19.21	118.71	1954.03	1534.69	132.27	19.21	81.11	1954.03	1534.69	102.20
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	39.3	19.61	124.87	1994.92	1566.81	139.17	19.61	87.28	1994.92	1566.81	109.09
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	41.2	23.20	132.16	437.81	343.85	146.96	9.57	90.28	169.07	132.78	113.46
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	43.2	23.20	139.45	439.64	345.29	154.75	9.75	93.35	172.10	135.17	117.87

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	45.2	23.20	146.73	441.47	346.73	162.55	9.92	96.46	175.14	137.56	122.33
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	47.1	23.20	154.02	443.30	348.17	170.34	10.09	99.63	178.18	139.94	126.83
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	49.1	23.20	161.31	445.14	349.61	178.14	10.26	102.86	181.22	142.33	131.37
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	51.1	23.20	168.60	446.97	351.05	185.93	10.43	106.13	184.26	144.72	135.96
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	53.0	23.20	175.89	448.80	352.49	193.73	10.61	109.47	187.30	147.11	140.59
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	55.0	23.20	183.18	450.64	353.93	201.52	10.78	112.85	190.34	149.49	145.26
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	56.9	23.20	190.47	452.47	355.37	209.31	10.95	116.29	193.38	151.88	149.98
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	58.9	23.20	197.75	454.30	356.81	217.11	11.12	119.79	196.42	154.27	154.73
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	60.9	20.42	204.17	1568.24	1231.69	224.20	20.42	126.20	1568.24	1231.69	161.83
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	62.8	20.77	210.70	1594.95	1252.67	231.39	20.77	132.73	1594.95	1252.67	169.01
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	64.8	21.12	217.33	1621.66	1273.65	238.66	21.12	139.36	1621.66	1273.65	176.29
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	66.8	21.47	224.08	1648.37	1294.62	246.02	21.47	146.11	1648.37	1294.62	183.65
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	68.7	21.82	230.93	1675.07	1315.60	253.47	21.82	152.96	1675.07	1315.60	191.09
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	70.7	21.35	237.64	411.81	323.43	260.79	12.26	156.81	216.47	170.02	196.14
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	72.6	21.35	244.34	413.64	324.87	268.12	12.43	160.72	219.51	172.41	201.22
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	74.6	21.35	251.05	415.48	326.31	275.45	12.60	164.68	222.55	174.79	206.35
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	76.6	21.35	257.76	417.31	327.75	282.78	12.78	168.69	225.59	177.18	211.53
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	78.5	21.35	264.47	419.14	329.19	290.11	12.95	172.76	228.63	179.57	216.75
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	80.5	21.35	271.18	420.98	330.63	297.44	13.12	176.88	231.67	181.95	222.01
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	82.5	21.35	277.88	422.81	332.07	304.77	13.29	181.06	234.71	184.34	227.31
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	84.4	21.35	284.59	424.64	333.51	312.10	13.46	185.29	237.75	186.73	232.66
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	86.4	21.35	291.30	426.47	334.95	319.43	13.64	189.57	240.79	189.11	238.05
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	88.4	21.35	298.01	428.31	336.39	326.76	13.81	193.91	243.83	191.50	243.48
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	90.3	21.35	304.72	430.14	337.83	334.09	13.98	198.30	246.87	193.89	248.96
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	92.3	21.35	311.42	431.97	339.27	341.42	14.15	202.75	249.91	196.28	254.48
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	94.2	21.35	318.13	433.81	340.71	348.75	14.32	207.25	252.95	198.66	260.04
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	96.2	21.35	324.84	435.64	342.15	356.08	14.50	211.80	255.98	201.05	265.65
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	98.2	21.35	331.55	437.47	343.59	363.41	14.67	216.41	259.02	203.44	271.30
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	100.1	21.35	338.26	439.31	345.03	370.74	14.84	221.07	262.06	205.82	276.99
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	102.1	21.35	344.96	441.14	346.47	378.07	15.01	225.79	265.10	208.21	282.73
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	104.1	21.35	351.67	442.97	347.91	385.40	15.18	230.56	268.14	210.60	288.51
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	106.0	21.35	358.38	444.80	349.35	392.73	15.36	235.38	271.18	212.99	294.33
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	108.0	21.35	365.09	446.64	350.79	400.06	15.53	240.26	274.22	215.37	300.20
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	110.0	21.35	371.79	448.47	352.23	407.39	15.70	245.19	277.26	217.76	306.11
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	111.9	21.35	378.50	450.30	353.67	414.72	15.87	250.18	280.30	220.15	312.06
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	113.9	21.35	385.21	452.14	355.11	422.05	16.05	255.22	283.34	222.53	318.06
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	115.8	21.35	391.92	453.97	356.55	429.38	16.22	260.32	286.38	224.92	324.10
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	117.8	21.35	398.63	455.80	357.99	436.71	16.39	265.46	289.42	227.31	330.18
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	119.8	21.35	405.33	457.64	359.43	444.04	16.56	270.67	292.46	229.69	336.31
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	121.7	21.35	412.04	459.47	360.87	451.37	16.73	275.92	295.50	232.08	342.48
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	123.7	21.35	418.75	461.30	362.30	458.70	16.91	281.24	298.53	234.47	348.69
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	125.7	21.35	425.46	463.13	363.74	466.03	17.08	286.60	301.57	236.86	354.94
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	127.6	21.35	432.17	464.97	365.18	473.36	17.25	292.02	304.61	239.24	361.24
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	129.6	21.35	438.87	466.80	366.62	480.69	17.42	297.49	307.65	241.63	367.59
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	131.6	21.35	445.58	468.63	368.06	488.02	17.59	303.02	310.69	244.02	373.97
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	133.5	21.35	452.29	470.47	369.50	495.35	17.77	308.60	313.73	246.40	380.40
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	135.5	21.35	459.00	472.30	370.94	502.68	17.94	314.24	316.77	248.79	386.87

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	137.4	21.35	465.71	474.13	372.38	510.01	18.11	319.93	319.81	251.18	393.39
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	139.4	21.35	472.41	475.97	373.82	517.34	18.28	325.67	322.85	253.56	399.95
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	479.12	477.80	375.26	524.67	18.46	331.47	325.89	255.95	406.55
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	143.3	21.35	485.83	479.63	376.70	532.00	18.63	337.32	328.93	258.34	413.19
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	145.3	21.35	492.54	481.46	378.14	539.33	18.80	343.23	331.97	260.73	419.88
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	147.3	21.35	499.25	483.30	379.58	546.66	18.97	349.19	335.01	263.11	426.61
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	149.2	21.35	505.95	485.13	381.02	553.99	19.14	355.20	338.05	265.50	433.39
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	151.2	21.35	512.66	486.96	382.46	561.32	19.32	361.27	341.08	267.89	440.21
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	153.2	21.35	519.37	488.80	383.90	568.65	19.49	367.39	344.12	270.27	447.07
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	155.1	21.35	526.08	490.63	385.34	575.98	19.66	373.57	347.16	272.66	453.97
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	157.1	21.35	532.79	492.46	386.78	583.31	19.83	379.80	350.20	275.05	460.92
10.1	8.1	9	0.70	0.50	0.83	36.55	40.43	159.0	40.93	545.64	4007.84	3147.75	595.56	40.93	392.66	4007.84	3147.75	473.17
10.2	8.2	9	0.70	0.50	0.83	36.55	40.41	161.0	41.32	558.63	4044.57	3176.60	607.91	41.32	405.64	4044.57	3176.60	485.52
10.3	8.3	9	0.70	0.50	0.83	36.55	40.39	163.0	41.72	571.73	4081.26	3205.41	620.36	41.72	418.75	4081.26	3205.41	497.97
10.4	8.4	9	0.70	0.50	0.83	36.55	40.38	164.9	42.11	584.96	4117.89	3234.19	632.90	42.11	431.97	4117.89	3234.19	510.51
10.5	8.5	10	0.70	0.50	0.76	34.25	31.70	166.9	39.14	597.26	3263.63	2563.25	644.70	39.14	444.27	3263.63	2563.25	522.31
10.6	8.6	10	0.70	0.50	0.76	34.25	31.69	168.9	39.50	609.67	3292.27	2585.74	656.59	39.50	456.68	3292.27	2585.74	534.21
10.7	8.7	10	0.70	0.50	0.76	34.25	31.67	170.8	39.86	622.19	3320.86	2608.20	668.58	39.86	469.20	3320.86	2608.20	546.19
10.8	8.8	10	0.70	0.50	0.76	34.25	31.66	172.8	40.23	634.83	3349.42	2630.63	680.65	40.23	481.84	3349.42	2630.63	558.26
10.9	8.9	10	0.70	0.50	0.76	34.25	31.64	174.8	40.59	647.58	3377.93	2653.02	692.82	40.59	494.59	3377.93	2653.02	570.43
11.0	9.0	10	0.70	0.50	0.76	34.25	31.63	176.7	40.95	660.45	3406.41	2675.39	705.07	40.95	507.46	3406.41	2675.39	582.68
11.1	9.1	10	0.70	0.50	0.76	34.25	31.61	178.7	41.32	673.43	3434.84	2697.72	717.42	41.32	520.44	3434.84	2697.72	595.03
11.2	9.2	10	0.70	0.50	0.76	34.25	31.59	180.6	41.68	686.52	3463.24	2720.02	729.86	41.68	533.53	3463.24	2720.02	607.47
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	47.55	701.46	4987.87	3917.46	743.77	47.55	548.47	4987.87	3917.46	621.38
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	47.96	716.53	5028.49	3949.36	757.79	47.96	563.54	5028.49	3949.36	635.40
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	48.37	731.73	5069.05	3981.22	771.91	48.37	578.74	5069.05	3981.22	649.52
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	48.79	747.05	5109.56	4013.04	786.14	48.79	594.07	5109.56	4013.04	663.75
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	49.20	762.51	5150.01	4044.80	800.46	49.20	609.52	5150.01	4044.80	678.08
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	49.61	778.09	5190.40	4076.53	814.90	49.61	625.10	5190.40	4076.53	692.51
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.02	793.80	5230.73	4108.21	829.43	50.02	640.82	5230.73	4108.21	707.04
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	50.43	809.65	5271.01	4139.84	844.07	50.43	656.66	5271.01	4139.84	721.68
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	50.84	825.62	5311.23	4171.43	858.81	50.84	672.63	5311.23	4171.43	736.42
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	51.25	841.72	5351.39	4202.98	873.65	51.25	688.73	5351.39	4202.98	751.26
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	51.66	857.94	5391.50	4234.47	888.60	51.66	704.96	5391.50	4234.47	766.21
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.07	874.30	5431.54	4265.92	903.65	52.07	721.32	5431.54	4265.92	781.26
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	52.48	890.79	5471.53	4297.33	918.80	52.48	737.80	5471.53	4297.33	796.41
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	52.89	907.40	5511.45	4328.68	934.05	52.89	754.42	5511.45	4328.68	811.66
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	53.30	924.15	5551.31	4359.99	949.41	53.30	771.16	5551.31	4359.99	827.02
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	53.71	941.02	5591.12	4391.25	964.87	53.71	788.04	5591.12	4391.25	842.49
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	54.12	958.02	5630.86	4422.47	980.44	54.12	805.04	5630.86	4422.47	858.05
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	54.53	975.15	5670.54	4453.63	996.11	54.53	822.17	5670.54	4453.63	873.72
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	54.94	992.41	5710.15	4484.74	1011.88	54.94	839.43	5710.15	4484.74	889.49
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	55.35	1009.80	5749.71	4515.81	1027.75	55.35	856.82	5749.71	4515.81	905.36
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	55.76	1027.32	5789.20	4546.83	1043.73	55.76	874.33	5789.20	4546.83	921.34
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	56.17	1044.97	5828.63	4577.80	1059.81	56.17	891.98	5828.63	4577.80	937.42
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	56.58	1062.74	5868.00	4608.71	1076.00	56.58	909.76	5868.00	4608.71	953.61
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	56.99	1080.65	5907.30	4639.58	1092.28	56.99	927.66	5907.30	4639.58	969.89

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	57.40	1098.68	5946.53	4670.40	1108.67	57.40	945.69	5946.53	4670.40	986.28
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	57.81	1116.84	5985.70	4701.16	1125.17	57.81	963.85	5985.70	4701.16	1002.78
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	58.22	1135.13	6024.81	4731.87	1141.76	58.22	982.15	6024.81	4731.87	1019.37
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	58.63	1153.55	6063.85	4762.54	1158.46	58.63	1000.57	6063.85	4762.54	1036.07
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.04	1172.10	6102.82	4793.15	1175.26	59.04	1019.11	6102.82	4793.15	1052.87
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	59.45	1190.78	6141.73	4823.70	1192.17	59.45	1037.79	6141.73	4823.70	1069.78
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	59.86	1209.58	6180.57	4854.21	1209.18	59.86	1056.60	6180.57	4854.21	1086.79
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	60.27	1228.52	6219.34	4884.66	1226.29	60.27	1075.53	6219.34	4884.66	1103.90
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	60.68	1247.58	6258.04	4915.06	1243.50	60.68	1094.60	6258.04	4915.06	1121.12
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.09	1266.78	6296.68	4945.40	1260.82	61.09	1113.79	6296.68	4945.40	1138.43
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	61.50	1286.10	6335.25	4975.69	1278.24	61.50	1133.11	6335.25	4975.69	1155.85
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	61.91	1305.55	6373.74	5005.93	1295.77	61.91	1152.56	6373.74	5005.93	1173.38
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.32	1325.13	6412.17	5036.11	1313.39	62.32	1172.14	6412.17	5036.11	1191.01
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	62.73	1344.84	6450.53	5066.23	1331.13	62.73	1191.85	6450.53	5066.23	1208.74
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.15	1364.68	6488.81	5096.30	1348.96	63.15	1211.69	6488.81	5096.30	1226.57
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	63.56	1384.64	6527.03	5126.32	1366.90	63.56	1231.66	6527.03	5126.32	1244.51
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	63.97	1404.74	6565.17	5156.27	1384.94	63.97	1251.75	6565.17	5156.27	1262.55
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.38	1424.96	6603.24	5186.18	1403.08	64.38	1271.98	6603.24	5186.18	1280.69
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	64.79	1445.32	6641.24	5216.02	1421.32	64.79	1292.33	6641.24	5216.02	1298.94
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.20	1465.80	6679.17	5245.81	1439.67	65.20	1312.81	6679.17	5245.81	1317.28
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	65.61	1486.41	6717.02	5275.54	1458.13	65.61	1333.42	6717.02	5275.54	1335.74
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.02	1507.15	6754.80	5305.21	1476.68	66.02	1354.16	6754.80	5305.21	1354.29
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.43	1528.02	6792.51	5334.82	1495.34	66.43	1375.03	6792.51	5334.82	1372.95
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	66.84	1549.02	6830.14	5364.38	1514.10	66.84	1396.03	6830.14	5364.38	1391.71
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.25	1570.14	6867.69	5393.87	1532.97	67.25	1417.16	6867.69	5393.87	1410.58
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	67.66	1591.40	6905.17	5423.31	1551.93	67.66	1438.41	6905.17	5423.31	1429.55
16.3	14.3	11	0.70	0.50	0.86	37.70	43.86	280.8	68.07	1612.78	6942.58	5452.69	1571.01	68.07	1459.80	6942.58	5452.69	1448.62
16.4	14.4	11	0.70	0.50	0.86	37.70	43.84	282.7	68.48	1634.30	6979.90	5482.00	1590.18	68.48	1481.31	6979.90	5482.00	1467.79
16.5	14.5	11	0.70	0.50	0.86	37.70	43.81	284.7	68.89	1655.94	7017.15	5511.26	1609.46	68.89	1502.95	7017.15	5511.26	1487.07
16.6	14.6	11	0.70	0.50	0.86	37.70	43.78	286.7	69.30	1677.71	7054.33	5540.46	1628.84	69.30	1524.72	7054.33	5540.46	1506.45
16.7	14.7	11	0.70	0.50	0.86	37.70	43.75	288.6	69.71	1699.61	7091.42	5569.59	1648.32	69.71	1546.62	7091.42	5569.59	1525.93
16.8	14.8	11	0.70	0.50	0.86	37.70	43.72	290.6	70.12	1721.64	7128.44	5598.66	1667.91	70.12	1568.65	7128.44	5598.66	1545.52
16.9	14.9	11	0.70	0.50	0.86	37.70	43.69	292.6	70.53	1743.79	7165.38	5627.67	1687.60	70.53	1590.81	7165.38	5627.67	1565.21
17.0	15.0	11	0.70	0.50	0.86	37.70	43.66	294.5	70.94	1766.08	7202.24	5656.62	1707.39	70.94	1613.10	7202.24	5656.62	1585.00

1.2.3.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1319	1221

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	1.3	30.10	7.56	813.62	408.97	7.31	5.82	1.46	102.82	51.68	2.43
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	2.5	30.10	15.13	815.45	409.89	14.62	5.99	2.97	105.86	53.21	4.89
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	3.8	30.10	22.69	817.28	410.81	21.93	6.17	4.52	108.90	54.74	7.39
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	5.0	30.10	30.26	819.11	411.73	29.23	6.34	6.11	111.94	56.27	9.92
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	6.3	30.10	37.82	820.95	412.65	36.54	6.51	7.75	114.98	57.79	12.48
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	7.5	13.98	41.34	1422.45	715.00	40.61	13.98	11.26	1422.45	715.00	16.55
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	8.8	14.39	44.96	1463.34	735.55	44.76	14.39	14.88	1463.34	735.55	20.70
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	10.1	14.79	48.67	1504.23	756.11	48.99	14.79	18.60	1504.23	756.11	24.93
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	11.3	15.19	52.49	1545.12	776.66	53.30	15.19	22.42	1545.12	776.66	29.24
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	12.6	15.59	56.41	1586.01	797.22	57.69	15.59	26.33	1586.01	797.22	33.63
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	13.8	16.00	60.43	1626.90	817.77	62.17	16.00	30.35	1626.90	817.77	38.11
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	15.1	16.40	64.55	1667.79	838.32	66.72	16.40	34.48	1667.79	838.32	42.66
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	16.3	16.80	68.77	1708.68	858.88	71.35	16.80	38.70	1708.68	858.88	47.29
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	17.6	17.20	73.10	1749.57	879.43	76.07	17.20	43.02	1749.57	879.43	52.01
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	18.8	17.60	77.52	1790.47	899.99	80.87	17.60	47.44	1790.47	899.99	56.81
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	20.1	18.01	82.04	1831.36	920.54	85.74	18.01	51.97	1831.36	920.54	61.68
3.7	1.7	4	0.70	0.50	0.73	33.10	28.00	21.4	15.93	86.05	1222.88	614.69	90.20	15.93	55.97	1222.88	614.69	66.14
3.8	1.8	4	0.70	0.50	0.73	33.10	28.00	22.6	16.27	90.14	1249.59	628.11	94.73	16.27	60.06	1249.59	628.11	70.67
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	23.9	19.21	94.97	1954.03	982.20	99.85	19.21	64.89	1954.03	982.20	75.79
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	25.1	19.61	99.90	1994.92	1002.76	105.05	19.61	69.82	1994.92	1002.76	80.99
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	26.4	23.20	105.73	437.81	220.06	110.97	9.57	72.23	169.07	84.98	84.17
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	27.6	23.20	111.56	439.64	220.99	116.89	9.75	74.68	172.10	86.51	87.39

Breve termine

Lungo termine

Palo

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	28.9	23.20	117.39	441.47	221.91	122.81	9.92	77.17	175.14	88.04	90.64
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	30.2	23.20	123.22	443.30	222.83	128.73	10.09	79.70	178.18	89.56	93.92
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	31.4	23.20	129.05	445.14	223.75	134.66	10.26	82.28	181.22	91.09	97.24
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	32.7	23.20	134.88	446.97	224.67	140.58	10.43	84.91	184.26	92.62	100.60
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	33.9	23.20	140.71	448.80	225.59	146.50	10.61	87.57	187.30	94.15	103.99
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	35.2	23.20	146.54	450.64	226.51	152.42	10.78	90.28	190.34	95.68	107.41
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	36.4	23.20	152.37	452.47	227.44	158.34	10.95	93.03	193.38	97.20	110.87
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	37.7	23.20	158.20	454.30	228.36	164.26	11.12	95.83	196.42	98.73	114.36
5.1	3.1	7	0.70	0.50	0.73	33.10	28.00	39.0	20.42	163.34	1568.24	788.28	169.62	20.42	100.96	1568.24	788.28	119.73
5.2	3.2	7	0.70	0.50	0.73	33.10	28.00	40.2	20.77	168.56	1594.95	801.71	175.06	20.77	106.18	1594.95	801.71	125.16
5.3	3.3	7	0.70	0.50	0.73	33.10	28.00	41.5	21.12	173.86	1621.66	815.13	180.56	21.12	111.49	1621.66	815.13	130.66
5.4	3.4	7	0.70	0.50	0.73	33.10	28.00	42.7	21.47	179.26	1648.37	828.56	186.13	21.47	116.89	1648.37	828.56	136.23
5.5	3.5	7	0.70	0.50	0.73	33.10	28.00	44.0	21.82	184.74	1675.07	841.98	191.78	21.82	122.37	1675.07	841.98	141.88
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	45.2	21.35	190.11	411.81	207.00	197.33	12.26	125.45	216.47	108.81	145.60
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	46.5	21.35	195.48	413.64	207.92	202.88	12.43	128.57	219.51	110.34	149.35
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	47.8	21.35	200.84	415.48	208.84	208.43	12.60	131.74	222.55	111.87	153.15
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	49.0	21.35	206.21	417.31	209.76	213.98	12.78	134.95	225.59	113.39	156.97
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	50.3	21.35	211.57	419.14	210.68	219.53	12.95	138.21	228.63	114.92	160.83
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	51.5	21.35	216.94	420.98	211.61	225.07	13.12	141.50	231.67	116.45	164.73
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	52.8	21.35	222.31	422.81	212.53	230.62	13.29	144.84	234.71	117.98	168.65
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	54.0	21.35	227.67	424.64	213.45	236.17	13.46	148.23	237.75	119.51	172.62
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	55.3	21.35	233.04	426.47	214.37	241.72	13.64	151.66	240.79	121.03	176.62
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	56.5	21.35	238.41	428.31	215.29	247.27	13.81	155.13	243.83	122.56	180.65
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	57.8	21.35	243.77	430.14	216.21	252.82	13.98	158.64	246.87	124.09	184.72
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	59.1	21.35	249.14	431.97	217.13	258.37	14.15	162.20	249.91	125.62	188.82
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	60.3	21.35	254.51	433.81	218.05	263.92	14.32	165.80	252.95	127.14	192.96
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	61.6	21.35	259.87	435.64	218.98	269.47	14.50	169.44	255.98	128.67	197.13
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	62.8	21.35	265.24	437.47	219.90	275.02	14.67	173.13	259.02	130.20	201.33
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	64.1	21.35	270.60	439.31	220.82	280.57	14.84	176.86	262.06	131.73	205.57
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	65.3	21.35	275.97	441.14	221.74	286.12	15.01	180.63	265.10	133.26	209.85
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	66.6	21.35	281.34	442.97	222.66	291.67	15.18	184.45	268.14	134.78	214.16
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	67.9	21.35	286.70	444.80	223.58	297.22	15.36	188.31	271.18	136.31	218.50
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	69.1	21.35	292.07	446.64	224.50	302.77	15.53	192.21	274.22	137.84	222.88
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	70.4	21.35	297.44	448.47	225.43	308.32	15.70	196.15	277.26	139.37	227.30
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	71.6	21.35	302.80	450.30	226.35	313.87	15.87	200.14	280.30	140.89	231.74
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	72.9	21.35	308.17	452.14	227.27	319.42	16.05	204.18	283.34	142.42	236.23
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	74.1	21.35	313.53	453.97	228.19	324.97	16.22	208.25	286.38	143.95	240.74
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	75.4	21.35	318.90	455.80	229.11	330.52	16.39	212.37	289.42	145.48	245.30
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	76.7	21.35	324.27	457.64	230.03	336.07	16.56	216.53	292.46	147.00	249.88
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	77.9	21.35	329.63	459.47	230.95	341.62	16.73	220.74	295.50	148.53	254.50
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	79.2	21.35	335.00	461.30	231.88	347.17	16.91	224.99	298.53	150.06	259.16
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	80.4	21.35	340.37	463.13	232.80	352.72	17.08	229.28	301.57	151.59	263.85
8.5	6.5	8	0.63	0.50	0.40	19.00	3.56	81.7	21.35	345.73	464.97	233.72	358.27	17.25	233.62	304.35	152.98	268.57
8.6	6.6	8	0.63	0.50	0.40	19.00	3.56	82.9	21.35	351.10	466.80	234.64	363.82	17.42	238.00	307.13	154.38	273.33
8.7	6.7	8	0.63	0.50	0.40	19.00	3.56	84.2	21.35	356.47	468.63	235.56	369.37	17.59	242.42	309.90	155.77	278.13
8.8	6.8	8	0.63	0.50	0.40	19.00	3.56	85.5	21.35	361.83	470.47	236.48	374.92	17.77	246.88	312.66	157.16	282.96
8.9	6.9	8	0.63	0.50	0.40	19.00	3.55	86.7	21.35	367.20	472.30	237.40	380.47	17.94	251.39	315.41	158.54	287.82

9.0	7.0	8	0.63	0.50	0.40	19.00	3.55	88.0	21.35	372.56	474.13	238.32	386.02	18.11	255.94	318.16	159.92	292.72
9.1	7.1	8	0.63	0.50	0.40	19.00	3.55	89.2	21.35	377.93	475.97	239.25	391.57	18.28	260.54	320.90	161.30	297.65
9.2	7.2	8	0.63	0.50	0.40	19.00	3.54	90.5	21.35	383.30	477.80	240.17	397.12	18.46	265.18	323.64	162.68	302.62
9.3	7.3	8	0.63	0.50	0.40	19.00	3.54	91.7	21.35	388.66	479.63	241.09	402.67	18.63	269.86	326.36	164.05	307.62
9.4	7.4	8	0.63	0.50	0.40	19.00	3.54	93.0	21.35	394.03	481.46	242.01	408.22	18.80	274.58	329.09	165.42	312.66
9.5	7.5	8	0.63	0.50	0.40	19.00	3.53	94.2	21.35	399.40	483.30	242.93	413.76	18.97	279.35	331.80	166.78	317.73
9.6	7.6	8	0.63	0.50	0.40	19.00	3.53	95.5	21.35	404.76	485.13	243.85	419.31	19.14	284.16	334.51	168.14	322.83
9.7	7.7	8	0.63	0.50	0.40	19.00	3.53	96.8	21.35	410.13	486.96	244.77	424.86	19.32	289.02	337.21	169.50	327.97
9.8	7.8	8	0.63	0.50	0.40	19.00	3.52	98.0	21.35	415.50	488.80	245.70	430.41	19.49	293.91	339.90	170.85	333.15
9.9	7.9	8	0.63	0.50	0.40	19.00	3.52	99.3	21.35	420.86	490.63	246.62	435.96	19.66	298.85	342.59	172.21	338.36
10.0	8.0	8	0.63	0.50	0.40	19.00	3.52	100.5	21.35	426.23	492.46	247.54	441.51	19.83	303.84	345.27	173.55	343.60
10.1	8.1	9	0.70	0.50	0.83	36.55	40.04	101.8	40.93	436.51	3968.75	1994.91	451.00	40.93	314.13	3968.75	1994.91	353.09
10.2	8.2	9	0.70	0.50	0.83	36.55	40.01	103.0	41.32	446.90	4004.35	2012.81	460.56	41.32	324.51	4004.35	2012.81	362.65
10.3	8.3	9	0.70	0.50	0.83	36.55	39.99	104.3	41.72	457.39	4039.89	2030.67	470.21	41.72	335.00	4039.89	2030.67	372.30
10.4	8.4	9	0.70	0.50	0.83	36.55	39.96	105.6	42.11	467.97	4075.36	2048.50	479.93	42.11	345.58	4075.36	2048.50	382.02
10.5	8.5	10	0.70	0.50	0.76	34.25	31.35	106.8	39.14	477.81	3227.74	1622.44	489.06	39.14	355.42	3227.74	1622.44	391.15
10.6	8.6	10	0.70	0.50	0.76	34.25	31.33	108.1	39.50	487.73	3255.39	1636.34	498.26	39.50	365.34	3255.39	1636.34	400.35
10.7	8.7	10	0.70	0.50	0.76	34.25	31.31	109.3	39.86	497.75	3282.98	1650.21	507.53	39.86	375.36	3282.98	1650.21	409.62
10.8	8.8	10	0.70	0.50	0.76	34.25	31.29	110.6	40.23	507.86	3310.52	1664.05	516.87	40.23	385.47	3310.52	1664.05	418.96
10.9	8.9	10	0.70	0.50	0.76	34.25	31.27	111.8	40.59	518.06	3338.00	1677.86	526.29	40.59	395.68	3338.00	1677.86	428.38
11.0	9.0	10	0.70	0.50	0.76	34.25	31.24	113.1	40.95	528.36	3365.43	1691.65	535.78	40.95	405.97	3365.43	1691.65	437.87
11.1	9.1	10	0.70	0.50	0.76	34.25	31.22	114.4	41.32	538.74	3392.79	1705.40	545.35	41.32	416.35	3392.79	1705.40	447.44
11.2	9.2	10	0.70	0.50	0.76	34.25	31.20	115.6	41.68	549.22	3420.10	1719.13	554.98	41.68	426.83	3420.10	1719.13	457.07
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	47.55	561.17	4928.49	2477.33	565.80	47.55	438.78	4928.49	2477.33	467.89
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	47.96	573.22	4967.56	2496.97	576.70	47.96	450.83	4967.56	2496.97	478.79
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	48.37	585.38	5006.56	2516.57	587.68	48.37	462.99	5006.56	2516.57	489.77
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	48.79	597.64	5045.47	2536.13	598.75	48.79	475.25	5045.47	2536.13	500.84
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	49.20	610.01	5084.30	2555.65	609.90	49.20	487.62	5084.30	2555.65	511.99
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	49.61	622.47	5123.04	2575.12	621.13	49.61	500.08	5123.04	2575.12	523.22
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.02	635.04	5161.70	2594.55	632.44	50.02	512.65	5161.70	2594.55	534.53
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	50.43	647.72	5200.27	2613.94	643.84	50.43	525.33	5200.27	2613.94	545.93
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	50.84	660.49	5238.75	2633.28	655.32	50.84	538.10	5238.75	2633.28	557.40
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	51.25	673.37	5277.15	2652.59	666.88	51.25	550.98	5277.15	2652.59	568.96
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	51.66	686.36	5315.46	2671.84	678.52	51.66	563.97	5315.46	2671.84	580.61
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.07	699.44	5353.68	2691.05	690.24	52.07	577.05	5353.68	2691.05	592.33
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	52.48	712.63	5391.81	2710.22	702.05	52.48	590.24	5391.81	2710.22	604.14
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	52.89	725.92	5429.86	2729.34	713.94	52.89	603.53	5429.86	2729.34	616.03
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	53.30	739.32	5467.81	2748.42	725.92	53.30	616.93	5467.81	2748.42	628.00
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	53.71	752.82	5505.67	2767.45	737.97	53.71	630.43	5505.67	2767.45	640.06
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	54.12	766.42	5543.44	2786.44	750.11	54.12	644.03	5543.44	2786.44	652.20
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	54.53	780.12	5581.11	2805.37	762.33	54.53	657.73	5581.11	2805.37	664.42
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	54.94	793.93	5618.70	2824.26	774.63	54.94	671.54	5618.70	2824.26	676.72
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	55.35	807.84	5656.18	2843.11	787.02	55.35	685.45	5656.18	2843.11	689.11
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	55.76	821.86	5693.58	2861.90	799.48	55.76	699.47	5693.58	2861.90	701.57
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	56.17	835.97	5730.87	2880.65	812.04	56.17	713.58	5730.87	2880.65	714.12
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	56.58	850.19	5768.08	2899.35	824.67	56.58	727.80	5768.08	2899.35	726.76
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	56.99	864.52	5805.18	2918.00	837.38	56.99	742.13	5805.18	2918.00	739.47

13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	57.40	878.94	5842.19	2936.60	850.18	57.40	756.55	5842.19	2936.60	752.27
13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	57.81	893.47	5879.09	2955.16	863.06	57.81	771.08	5879.09	2955.16	765.15
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	58.22	908.11	5915.90	2973.66	876.02	58.22	785.72	5915.90	2973.66	778.11
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	58.63	922.84	5952.61	2992.11	889.07	58.63	800.45	5952.61	2992.11	791.16
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.04	937.68	5989.22	3010.51	902.20	59.04	815.29	5989.22	3010.51	804.29
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	59.45	952.62	6025.73	3028.86	915.41	59.45	830.23	6025.73	3028.86	817.50
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	59.86	967.67	6062.13	3047.16	928.70	59.86	845.28	6062.13	3047.16	830.79
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	60.27	982.82	6098.44	3065.41	942.08	60.27	860.43	6098.44	3065.41	844.16
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	60.68	998.07	6134.63	3083.60	955.53	60.68	875.68	6134.63	3083.60	857.62
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.09	1013.42	6170.73	3101.75	969.07	61.09	891.03	6170.73	3101.75	871.16
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	61.50	1028.88	6206.72	3119.84	982.70	61.50	906.49	6206.72	3119.84	884.79
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	61.91	1044.44	6242.60	3137.87	996.40	61.91	922.05	6242.60	3137.87	898.49
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.32	1060.10	6280.72	3157.04	1010.19	62.32	937.72	6280.72	3157.04	912.28
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	62.73	1075.87	6318.80	3176.18	1024.06	62.73	953.48	6318.80	3176.18	926.15
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.15	1091.74	6356.84	3195.30	1038.01	63.15	969.35	6356.84	3195.30	940.10
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	63.56	1107.71	6394.84	3214.40	1052.05	63.56	985.33	6394.84	3214.40	954.14
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	63.97	1123.79	6432.79	3233.48	1066.17	63.97	1001.40	6432.79	3233.48	968.25
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.38	1139.97	6470.71	3252.53	1080.37	64.38	1017.58	6470.71	3252.53	982.45
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	64.79	1156.25	6508.58	3271.57	1094.65	64.79	1033.86	6508.58	3271.57	996.74
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.20	1172.64	6546.42	3290.59	1109.01	65.20	1050.25	6546.42	3290.59	1011.10
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	65.61	1189.13	6584.21	3309.59	1123.46	65.61	1066.74	6584.21	3309.59	1025.55
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.02	1205.72	6621.96	3328.56	1137.99	66.02	1083.33	6621.96	3328.56	1040.08
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.43	1222.41	6659.67	3347.52	1152.60	66.43	1100.03	6659.67	3347.52	1054.69
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	66.84	1239.21	6697.35	3366.45	1167.30	66.84	1116.82	6697.35	3366.45	1069.39
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.25	1256.11	6734.98	3385.37	1182.08	67.25	1133.72	6734.98	3385.37	1084.17
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	67.66	1273.12	6772.56	3404.26	1196.94	67.66	1150.73	6772.56	3404.26	1099.03
16.3	14.3	11	0.70	0.50	0.86	37.70	43.03	179.7	68.07	1290.23	6810.11	3423.14	1211.88	68.07	1167.84	6810.11	3423.14	1113.97
16.4	14.4	11	0.70	0.50	0.86	37.70	43.01	181.0	68.48	1307.44	6847.62	3441.99	1226.90	68.48	1185.05	6847.62	3441.99	1128.99
16.5	14.5	11	0.70	0.50	0.86	37.70	42.98	182.2	68.89	1324.75	6885.09	3460.82	1242.01	68.89	1202.36	6885.09	3460.82	1144.10
16.6	14.6	11	0.70	0.50	0.86	37.70	42.96	183.5	69.30	1342.17	6922.51	3479.64	1257.20	69.30	1219.78	6922.51	3479.64	1159.29
16.7	14.7	11	0.70	0.50	0.86	37.70	42.94	184.7	69.71	1359.69	6959.90	3498.43	1272.47	69.71	1237.30	6959.90	3498.43	1174.56
16.8	14.8	11	0.70	0.50	0.86	37.70	42.92	186.0	70.12	1377.31	6997.25	3517.20	1287.83	70.12	1254.92	6997.25	3517.20	1189.92
16.9	14.9	11	0.70	0.50	0.86	37.70	42.89	187.2	70.53	1395.04	7034.55	3535.95	1303.27	70.53	1272.65	7034.55	3535.95	1205.36
17.0	15.0	11	0.70	0.50	0.86	37.70	42.87	188.5	70.94	1412.87	7071.82	3554.68	1318.79	70.94	1290.48	7071.82	3554.68	1220.88

1.2.3.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.1**	**19.35**	**40**		0.70	0.50	0.84
2	**1.1**	**2.5**	**18.33**	**22**	**86**	0.35	0.50	0.40
3	**2.5**	**3.6**	**19.35**	**40**		0.70	0.50	0.84
4	**3.6**	**3.8**	**19.35**			0.70	0.50	0.00
5	**3.8**	**4.0**	**19.35**	**40**		0.70	0.50	0.84
6	**4.0**	**5.0**	**18.33**	**22**	**40**	0.58	0.50	0.40
7	**5.0**	**5.5**	**19.35**			0.70	0.50	0.00
8	**5.5**	**10.0**	**18.33**	**22**	**34**	0.63	0.50	0.40
9	**10.0**	**10.4**	**19.35**	**40**		0.70	0.50	0.83
10	**10.4**	**11.2**	**19.35**			0.70	0.50	0.00
11	**11.2**	**30.0**	**19.35**	**41**		0.70	0.50	0.86

1.2.3.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1980	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.8	30.10	11.35	813.62	920.18	11.91
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	5.7	30.10	22.69	815.45	922.25	23.81
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	8.5	30.10	34.04	817.28	924.32	35.72
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	11.3	30.10	45.39	819.11	926.40	47.62
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	14.1	30.10	56.74	820.95	928.47	59.53
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	17.0	13.98	62.01	1422.45	1608.75	66.57
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	19.8	14.39	67.43	1463.34	1654.99	73.74
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	22.6	14.79	73.01	1504.23	1701.24	81.03
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	25.4	15.19	78.74	1545.12	1747.49	88.44
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	28.3	15.59	84.61	1586.01	1793.73	95.97
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	31.1	16.00	90.64	1626.90	1839.98	103.62
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	33.9	16.40	96.83	1667.79	1886.23	111.39
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	36.8	16.80	103.16	1708.68	1932.47	119.28
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	39.6	17.20	109.64	1749.57	1978.72	127.30
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	42.4	17.60	116.28	1790.47	2024.97	135.44
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	45.2	18.01	123.07	1831.36	2071.22	143.69
3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	48.1	0.00	123.07	0.00	0.00	146.52
3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	50.9	0.00	123.07	0.00	0.00	149.35
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	53.7	19.21	130.31	1954.03	2209.96	157.97
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	56.5	19.61	137.70	1994.92	2256.20	166.71
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	59.4	23.20	146.45	437.81	495.15	176.54
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	62.2	23.20	155.20	439.64	497.22	186.36

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	65.0	23.20	163.94	441.47	499.29	196.18
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	67.9	23.20	172.69	443.30	501.37	206.01
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	70.7	23.20	181.43	445.14	503.44	215.83
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	73.5	23.20	190.18	446.97	505.51	225.66
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	76.3	23.20	198.93	448.80	507.58	235.48
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	79.2	23.20	207.67	450.64	509.66	245.31
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	82.0	23.20	216.42	452.47	511.73	255.13
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	84.8	23.20	225.17	454.30	513.80	264.96
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	87.7	0.00	225.17	0.00	0.00	267.78
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	90.5	0.00	225.17	0.00	0.00	270.61
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	93.3	0.00	225.17	0.00	0.00	273.44
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	96.1	0.00	225.17	0.00	0.00	276.27
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	99.0	0.00	225.17	0.00	0.00	279.09
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	101.8	21.35	233.22	411.81	465.75	288.36
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	104.6	21.35	241.26	413.64	467.82	297.63
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	107.4	21.35	249.31	415.48	469.89	306.89
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	110.3	21.35	257.36	417.31	471.97	316.16
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	113.1	21.35	265.41	419.14	474.04	325.43
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	115.9	21.35	273.46	420.98	476.11	334.70
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	118.8	21.35	281.51	422.81	478.18	343.96
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	121.6	21.35	289.56	424.64	480.26	353.23
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	124.4	21.35	297.61	426.47	482.33	362.50
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	127.2	21.35	305.66	428.31	484.40	371.76
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	130.1	21.35	313.71	430.14	486.48	381.03
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	132.9	21.35	321.76	431.97	488.55	390.30
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	135.7	21.35	329.81	433.81	490.62	399.56
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	138.5	21.35	337.86	435.64	492.70	408.83
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	345.91	437.47	494.77	418.10
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	144.2	21.35	353.96	439.31	496.84	427.37
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	147.0	21.35	362.01	441.14	498.92	436.63
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	149.9	21.35	370.06	442.97	500.99	445.90
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	152.7	21.35	378.11	444.80	503.06	455.17
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	155.5	21.35	386.16	446.64	505.13	464.43
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	158.3	21.35	394.21	448.47	507.21	473.70
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	161.2	21.35	402.26	450.30	509.28	482.97
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	164.0	21.35	410.30	452.14	511.35	492.23
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	166.8	21.35	418.35	453.97	513.43	501.50
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	169.6	21.35	426.40	455.80	515.50	510.77
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	172.5	21.35	434.45	457.64	517.57	520.04
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	175.3	21.35	442.50	459.47	519.65	529.30
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	178.1	21.35	450.55	461.30	521.72	538.57
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	181.0	21.35	458.60	463.13	523.79	547.84
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	183.8	21.35	466.65	464.97	525.87	557.10
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	186.6	21.35	474.70	466.80	527.94	566.37
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	189.4	21.35	482.75	468.63	530.01	575.64
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	192.3	21.35	490.80	470.47	532.08	584.91
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	195.1	21.35	498.85	472.30	534.16	594.17

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	197.9	21.35	506.90	474.13	536.23	603.44
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	200.7	21.35	514.95	475.97	538.30	612.71
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	203.6	21.35	523.00	477.80	540.38	621.97
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	206.4	21.35	531.05	479.63	542.45	631.24
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	209.2	21.35	539.10	481.46	544.52	640.51
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	212.1	21.35	547.15	483.30	546.60	649.77
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	214.9	21.35	555.20	485.13	548.67	659.04
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	217.7	21.35	563.25	486.96	550.74	668.31
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	220.5	21.35	571.29	488.80	552.82	677.58
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	223.4	21.35	579.34	490.63	554.89	686.84
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	226.2	21.35	587.39	492.46	556.96	696.11
10.1	8.1	9	0.70	0.50	0.83	36.55	40.45	229.0	40.93	602.82	4009.66	4534.81	711.28
10.2	8.2	9	0.70	0.50	0.83	36.55	40.45	231.8	41.32	618.40	4048.24	4578.46	726.57
10.3	8.3	9	0.70	0.50	0.83	36.55	40.45	234.7	41.72	634.13	4086.83	4622.10	741.98
10.4	8.4	9	0.70	0.50	0.83	36.55	40.45	237.5	42.11	650.00	4125.42	4665.74	757.51
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	240.3	0.00	650.00	0.00	0.00	760.34
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	243.2	0.00	650.00	0.00	0.00	763.16
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	246.0	0.00	650.00	0.00	0.00	765.99
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	248.8	0.00	650.00	0.00	0.00	768.82
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	251.6	0.00	650.00	0.00	0.00	771.65
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	254.5	0.00	650.00	0.00	0.00	774.47
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	257.3	0.00	650.00	0.00	0.00	777.30
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	260.1	0.00	650.00	0.00	0.00	780.13
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	47.55	667.93	5017.74	5674.93	797.30
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	47.96	686.01	5061.03	5723.89	814.59
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	48.37	704.25	5104.32	5772.85	832.01
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	48.79	722.64	5147.61	5821.81	849.55
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	49.20	741.19	5189.00	5868.62	867.21
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	49.61	759.89	5230.34	5915.37	885.00
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.02	778.75	5271.64	5962.08	902.91
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	50.43	797.76	5312.89	6008.74	920.95
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	50.84	816.92	5354.11	6055.35	939.11
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	51.25	836.24	5395.28	6101.92	957.39
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	51.66	855.72	5436.41	6148.43	975.80
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.07	875.34	5477.49	6194.90	994.33
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	52.48	895.13	5518.54	6241.32	1012.98
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	52.89	915.07	5559.53	6287.68	1031.76
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	53.30	935.16	5600.49	6334.00	1050.66
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	53.71	955.41	5641.40	6380.27	1069.69
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	54.12	975.81	5682.26	6426.49	1088.84
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	54.53	996.37	5723.08	6472.65	1108.11
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	54.94	1017.08	5763.86	6518.77	1127.51
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	55.35	1037.94	5804.58	6564.83	1147.03
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	55.76	1058.97	5845.27	6610.84	1166.67
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	56.17	1080.14	5885.90	6656.80	1186.44
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	56.58	1101.47	5926.50	6702.71	1206.33
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	56.99	1122.96	5967.04	6748.56	1226.35

13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	57.40	1144.60	6007.54	6794.36	1246.49
13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	57.81	1166.39	6047.99	6840.11	1266.75
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	58.22	1188.34	6088.39	6885.81	1287.14
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	58.63	1210.44	6128.75	6931.45	1307.65
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.04	1232.70	6169.05	6977.03	1328.28
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	59.45	1255.11	6209.31	7022.57	1349.04
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	59.86	1277.68	6249.52	7068.04	1369.92
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	60.27	1300.40	6289.68	7113.47	1390.93
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	60.68	1323.28	6329.80	7158.83	1412.05
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.09	1346.31	6369.86	7204.14	1433.31
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	61.50	1369.50	6409.87	7249.40	1454.68
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	61.91	1392.84	6449.84	7294.59	1476.18
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.32	1416.34	6489.75	7339.73	1497.81
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	62.73	1439.99	6529.61	7384.82	1519.56
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.15	1463.79	6569.43	7429.85	1541.43
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	63.56	1487.75	6609.19	7474.81	1563.42
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	63.97	1511.87	6648.90	7519.72	1585.54
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.38	1536.14	6688.55	7564.58	1607.79
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	64.79	1560.56	6728.16	7609.37	1630.15
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.20	1585.14	6767.71	7654.10	1652.64
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	65.61	1609.87	6807.22	7698.78	1675.26
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.02	1634.76	6846.66	7743.39	1697.99
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.43	1659.80	6886.06	7787.95	1720.86
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	66.84	1685.00	6925.40	7832.44	1743.84
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.25	1710.35	6964.69	7876.88	1766.95
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	67.66	1735.86	7003.92	7921.25	1790.18
16.3	14.3	11	0.70	0.50	0.86	37.70	44.50	404.3	68.07	1761.52	7043.10	7965.56	1813.54
16.4	14.4	11	0.70	0.50	0.86	37.70	44.48	407.2	68.48	1787.34	7082.23	8009.81	1837.02
16.5	14.5	11	0.70	0.50	0.86	37.70	44.46	410.0	68.89	1813.31	7121.30	8054.00	1860.62
16.6	14.6	11	0.70	0.50	0.86	37.70	44.44	412.8	69.30	1839.43	7160.32	8098.13	1884.35
16.7	14.7	11	0.70	0.50	0.86	37.70	44.42	415.6	69.71	1865.71	7199.28	8142.19	1908.20
16.8	14.8	11	0.70	0.50	0.86	37.70	44.39	418.5	70.12	1892.15	7238.18	8186.19	1932.18
16.9	14.9	11	0.70	0.50	0.86	37.70	44.37	421.3	70.53	1918.73	7277.03	8230.12	1956.28
17.0	15.0	11	0.70	0.50	0.86	37.70	44.35	424.1	70.94	1945.48	7315.82	8274.00	1980.50

1.2.3.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1592	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	2.0	30.10	9.46	813.62	639.01	9.53
2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	3.9	30.10	18.91	815.45	640.45	19.06
2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	5.9	30.10	28.37	817.28	641.89	28.59
2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	7.9	30.10	37.82	819.11	643.33	38.11
2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	9.8	30.10	47.28	820.95	644.77	47.64
2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	11.8	13.98	51.67	1422.45	1117.19	53.12
2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	13.7	14.39	56.19	1463.34	1149.30	58.70
2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	15.7	14.79	60.84	1504.23	1181.42	64.38
2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	17.7	15.19	65.61	1545.12	1213.53	70.16
3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	19.6	15.59	70.51	1586.01	1245.65	76.04
3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	21.6	16.00	75.54	1626.90	1277.76	82.03
3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	23.6	16.40	80.69	1667.79	1309.88	88.11
3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	25.5	16.80	85.97	1708.68	1342.00	94.30
3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	27.5	17.20	91.37	1749.57	1374.11	100.58
3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	29.5	17.60	96.90	1790.47	1406.23	106.97
3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	31.4	18.01	102.56	1831.36	1438.34	113.46
3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	33.4	0.00	102.56	0.00	0.00	115.42
3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	35.3	0.00	102.56	0.00	0.00	117.39
3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	37.3	19.21	108.59	1954.03	1534.69	124.18
4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	39.3	19.61	114.75	1994.92	1566.81	131.07
4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	41.2	23.20	122.04	437.81	343.85	138.87
4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	43.2	23.20	129.33	439.64	345.29	146.66

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	45.2	23.20	136.62	441.47	346.73	154.46
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	47.1	23.20	143.91	443.30	348.17	162.25
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	49.1	23.20	151.20	445.14	349.61	170.04
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	51.1	23.20	158.48	446.97	351.05	177.84
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	53.0	23.20	165.77	448.80	352.49	185.63
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	55.0	23.20	173.06	450.64	353.93	193.43
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	56.9	23.20	180.35	452.47	355.37	201.22
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	58.9	23.20	187.64	454.30	356.81	209.02
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	60.9	0.00	187.64	0.00	0.00	210.98
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	62.8	0.00	187.64	0.00	0.00	212.94
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	64.8	0.00	187.64	0.00	0.00	214.91
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	66.8	0.00	187.64	0.00	0.00	216.87
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	68.7	0.00	187.64	0.00	0.00	218.83
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	70.7	21.35	194.35	411.81	323.43	226.16
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	72.6	21.35	201.05	413.64	324.87	233.49
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	74.6	21.35	207.76	415.48	326.31	240.82
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	76.6	21.35	214.47	417.31	327.75	248.15
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	78.5	21.35	221.18	419.14	329.19	255.48
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	80.5	21.35	227.89	420.98	330.63	262.81
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	82.5	21.35	234.59	422.81	332.07	270.14
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	84.4	21.35	241.30	424.64	333.51	277.47
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	86.4	21.35	248.01	426.47	334.95	284.80
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	88.4	21.35	254.72	428.31	336.39	292.13
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	90.3	21.35	261.43	430.14	337.83	299.46
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	92.3	21.35	268.13	431.97	339.27	306.79
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	94.2	21.35	274.84	433.81	340.71	314.12
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	96.2	21.35	281.55	435.64	342.15	321.45
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	98.2	21.35	288.26	437.47	343.59	328.78
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	100.1	21.35	294.97	439.31	345.03	336.11
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	102.1	21.35	301.67	441.14	346.47	343.44
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	104.1	21.35	308.38	442.97	347.91	350.77
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	106.0	21.35	315.09	444.80	349.35	358.10
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	108.0	21.35	321.80	446.64	350.79	365.43
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	110.0	21.35	328.50	448.47	352.23	372.76
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	111.9	21.35	335.21	450.30	353.67	380.09
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	113.9	21.35	341.92	452.14	355.11	387.42
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	115.8	21.35	348.63	453.97	356.55	394.75
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	117.8	21.35	355.34	455.80	357.99	402.08
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	119.8	21.35	362.04	457.64	359.43	409.41
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	121.7	21.35	368.75	459.47	360.87	416.74
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	123.7	21.35	375.46	461.30	362.30	424.07
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	125.7	21.35	382.17	463.13	363.74	431.40
8.5	6.5	8	0.63	0.50	0.40	19.00	3.57	127.6	21.35	388.88	464.97	365.18	438.73
8.6	6.6	8	0.63	0.50	0.40	19.00	3.57	129.6	21.35	395.58	466.80	366.62	446.06
8.7	6.7	8	0.63	0.50	0.40	19.00	3.57	131.6	21.35	402.29	468.63	368.06	453.39
8.8	6.8	8	0.63	0.50	0.40	19.00	3.57	133.5	21.35	409.00	470.47	369.50	460.72
8.9	6.9	8	0.63	0.50	0.40	19.00	3.57	135.5	21.35	415.71	472.30	370.94	468.05

9.0	7.0	8	0.63	0.50	0.40	19.00	3.57	137.4	21.35	422.42	474.13	372.38	475.38
9.1	7.1	8	0.63	0.50	0.40	19.00	3.57	139.4	21.35	429.12	475.97	373.82	482.71
9.2	7.2	8	0.63	0.50	0.40	19.00	3.57	141.4	21.35	435.83	477.80	375.26	490.04
9.3	7.3	8	0.63	0.50	0.40	19.00	3.57	143.3	21.35	442.54	479.63	376.70	497.37
9.4	7.4	8	0.63	0.50	0.40	19.00	3.57	145.3	21.35	449.25	481.46	378.14	504.70
9.5	7.5	8	0.63	0.50	0.40	19.00	3.57	147.3	21.35	455.96	483.30	379.58	512.03
9.6	7.6	8	0.63	0.50	0.40	19.00	3.57	149.2	21.35	462.66	485.13	381.02	519.36
9.7	7.7	8	0.63	0.50	0.40	19.00	3.57	151.2	21.35	469.37	486.96	382.46	526.69
9.8	7.8	8	0.63	0.50	0.40	19.00	3.57	153.2	21.35	476.08	488.80	383.90	534.02
9.9	7.9	8	0.63	0.50	0.40	19.00	3.57	155.1	21.35	482.79	490.63	385.34	541.35
10.0	8.0	8	0.63	0.50	0.40	19.00	3.57	157.1	21.35	489.50	492.46	386.78	548.68
10.1	8.1	9	0.70	0.50	0.83	36.55	40.43	159.0	40.93	502.35	4007.84	3147.75	560.93
10.2	8.2	9	0.70	0.50	0.83	36.55	40.41	161.0	41.32	515.34	4044.57	3176.60	573.27
10.3	8.3	9	0.70	0.50	0.83	36.55	40.39	163.0	41.72	528.44	4081.26	3205.41	585.72
10.4	8.4	9	0.70	0.50	0.83	36.55	40.38	164.9	42.11	541.67	4117.89	3234.19	598.27
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	166.9	0.00	541.67	0.00	0.00	600.23
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	168.9	0.00	541.67	0.00	0.00	602.20
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	170.8	0.00	541.67	0.00	0.00	604.16
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	172.8	0.00	541.67	0.00	0.00	606.12
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	174.8	0.00	541.67	0.00	0.00	608.09
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	176.7	0.00	541.67	0.00	0.00	610.05
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	178.7	0.00	541.67	0.00	0.00	612.01
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	180.6	0.00	541.67	0.00	0.00	613.98
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	47.55	556.61	4987.87	3917.46	627.89
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	47.96	571.68	5028.49	3949.36	641.91
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	48.37	586.88	5069.05	3981.22	656.03
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	48.79	602.20	5109.56	4013.04	670.26
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	49.20	617.66	5150.01	4044.80	684.59
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	49.61	633.24	5190.40	4076.53	699.02
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.02	648.95	5230.73	4108.21	713.55
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	50.43	664.80	5271.01	4139.84	728.19
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	50.84	680.77	5311.23	4171.43	742.93
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	51.25	696.87	5351.39	4202.98	757.77
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	51.66	713.10	5391.50	4234.47	772.72
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.07	729.45	5431.54	4265.92	787.77
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	52.48	745.94	5471.53	4297.33	802.92
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	52.89	762.56	5511.45	4328.68	818.17
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	53.30	779.30	5551.31	4359.99	833.53
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	53.71	796.17	5591.12	4391.25	849.00
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	54.12	813.17	5630.86	4422.47	864.56
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	54.53	830.31	5670.54	4453.63	880.23
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	54.94	847.56	5710.15	4484.74	896.00
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	55.35	864.95	5749.71	4515.81	911.87
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	55.76	882.47	5789.20	4546.83	927.85
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	56.17	900.12	5828.63	4577.80	943.93
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	56.58	917.89	5868.00	4608.71	960.12
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	56.99	935.80	5907.30	4639.58	976.40

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	57.40	953.83	5946.53	4670.40	992.79
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	57.81	971.99	5985.70	4701.16	1009.29
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	58.22	990.28	6024.81	4731.87	1025.88
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	58.63	1008.70	6063.85	4762.54	1042.58
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.04	1027.25	6102.82	4793.15	1059.38
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	59.45	1045.93	6141.73	4823.70	1076.29
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	59.86	1064.74	6180.57	4854.21	1093.30
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	60.27	1083.67	6219.34	4884.66	1110.41
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	60.68	1102.74	6258.04	4915.06	1127.62
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.09	1121.93	6296.68	4945.40	1144.94
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	61.50	1141.25	6335.25	4975.69	1162.36
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	61.91	1160.70	6373.74	5005.93	1179.89
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.32	1180.28	6412.17	5036.11	1197.52
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	62.73	1199.99	6450.53	5066.23	1215.25
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.15	1219.83	6488.81	5096.30	1233.08
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	63.56	1239.79	6527.03	5126.32	1251.02
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	63.97	1259.89	6565.17	5156.27	1269.06
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.38	1280.11	6603.24	5186.18	1287.20
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	64.79	1300.47	6641.24	5216.02	1305.45
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.20	1320.95	6679.17	5245.81	1323.79
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	65.61	1341.56	6717.02	5275.54	1342.25
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.02	1362.30	6754.80	5305.21	1360.80
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.43	1383.17	6792.51	5334.82	1379.46
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	66.84	1404.17	6830.14	5364.38	1398.22
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.25	1425.29	6867.69	5393.87	1417.09
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	67.66	1446.55	6905.17	5423.31	1436.06
16.3	14.3	11	0.70	0.50	0.86	37.70	43.86	280.8	68.07	1467.93	6942.58	5452.69	1455.13
16.4	14.4	11	0.70	0.50	0.86	37.70	43.84	282.7	68.48	1489.45	6979.90	5482.00	1474.30
16.5	14.5	11	0.70	0.50	0.86	37.70	43.81	284.7	68.89	1511.09	7017.15	5511.26	1493.58
16.6	14.6	11	0.70	0.50	0.86	37.70	43.78	286.7	69.30	1532.86	7054.33	5540.46	1512.96
16.7	14.7	11	0.70	0.50	0.86	37.70	43.75	288.6	69.71	1554.76	7091.42	5569.59	1532.44
16.8	14.8	11	0.70	0.50	0.86	37.70	43.72	290.6	70.12	1576.79	7128.44	5598.66	1552.03
16.9	14.9	11	0.70	0.50	0.86	37.70	43.69	292.6	70.53	1598.95	7165.38	5627.67	1571.72
17.0	15.0	11	0.70	0.50	0.86	37.70	43.66	294.5	70.94	1621.23	7202.24	5656.62	1591.51

1.2.3.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1226	-

	$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)
Falda	0.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
Palo	0.2	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.3	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
Breve termine	0.4	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.5	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.6	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.7	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.8	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	0.9	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	1.0	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	1.1	0.0	1	0.70	0.50	0.84	37.00	0.00	0.0	0.00	0.00	0.00
	1.2	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.3	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.4	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.5	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.6	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.7	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.8	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	1.9	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	2.0	0.0	2	0.35	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00
	2.1	0.1	2	0.35	0.50	0.40	19.00	3.57	1.3	30.10	7.56	813.62
	2.2	0.2	2	0.35	0.50	0.40	19.00	3.57	2.5	30.10	15.13	815.45
	2.3	0.3	2	0.35	0.50	0.40	19.00	3.57	3.8	30.10	22.69	817.28
	2.4	0.4	2	0.35	0.50	0.40	19.00	3.57	5.0	30.10	30.26	819.11
	2.5	0.5	2	0.35	0.50	0.40	19.00	3.57	6.3	30.10	37.82	820.95
	2.6	0.6	3	0.70	0.50	0.84	37.13	42.86	7.5	13.98	41.34	1422.45
	2.7	0.7	3	0.70	0.50	0.84	37.13	42.86	8.8	14.39	44.96	1463.34
	2.8	0.8	3	0.70	0.50	0.84	37.13	42.86	10.1	14.79	48.67	1504.23
	2.9	0.9	3	0.70	0.50	0.84	37.13	42.86	11.3	15.19	52.49	1545.12
	3.0	1.0	3	0.70	0.50	0.84	37.13	42.86	12.6	15.59	56.41	1586.01
	3.1	1.1	3	0.70	0.50	0.84	37.13	42.86	13.8	16.00	60.43	1626.90
	3.2	1.2	3	0.70	0.50	0.84	37.13	42.86	15.1	16.40	64.55	1667.79
	3.3	1.3	3	0.70	0.50	0.84	37.13	42.86	16.3	16.80	68.77	1708.68
	3.4	1.4	3	0.70	0.50	0.84	37.13	42.86	17.6	17.20	73.10	1749.57
	3.5	1.5	3	0.70	0.50	0.84	37.13	42.86	18.8	17.60	77.52	1790.47
	3.6	1.6	3	0.70	0.50	0.84	37.13	42.86	20.1	18.01	82.04	1831.36
	3.7	1.7	4	0.70	0.50	0.00	0.00	0.00	21.4	0.00	82.04	0.00
	3.8	1.8	4	0.70	0.50	0.00	0.00	0.00	22.6	0.00	82.04	0.00
	3.9	1.9	5	0.70	0.50	0.84	37.13	42.86	23.9	19.21	86.87	1954.03
	4.0	2.0	5	0.70	0.50	0.84	37.13	42.86	25.1	19.61	91.80	1994.92
	4.1	2.1	6	0.58	0.50	0.40	19.00	3.57	26.4	23.20	97.63	437.81
	4.2	2.2	6	0.58	0.50	0.40	19.00	3.57	27.6	23.20	103.46	439.64

4.3	2.3	6	0.58	0.50	0.40	19.00	3.57	28.9	23.20	109.30	441.47
4.4	2.4	6	0.58	0.50	0.40	19.00	3.57	30.2	23.20	115.13	443.30
4.5	2.5	6	0.58	0.50	0.40	19.00	3.57	31.4	23.20	120.96	445.14
4.6	2.6	6	0.58	0.50	0.40	19.00	3.57	32.7	23.20	126.79	446.97
4.7	2.7	6	0.58	0.50	0.40	19.00	3.57	33.9	23.20	132.62	448.80
4.8	2.8	6	0.58	0.50	0.40	19.00	3.57	35.2	23.20	138.45	450.64
4.9	2.9	6	0.58	0.50	0.40	19.00	3.57	36.4	23.20	144.28	452.47
5.0	3.0	6	0.58	0.50	0.40	19.00	3.57	37.7	23.20	150.11	454.30
5.1	3.1	7	0.70	0.50	0.00	0.00	0.00	39.0	0.00	150.11	0.00
5.2	3.2	7	0.70	0.50	0.00	0.00	0.00	40.2	0.00	150.11	0.00
5.3	3.3	7	0.70	0.50	0.00	0.00	0.00	41.5	0.00	150.11	0.00
5.4	3.4	7	0.70	0.50	0.00	0.00	0.00	42.7	0.00	150.11	0.00
5.5	3.5	7	0.70	0.50	0.00	0.00	0.00	44.0	0.00	150.11	0.00
5.6	3.6	8	0.63	0.50	0.40	19.00	3.57	45.2	21.35	155.48	411.81
5.7	3.7	8	0.63	0.50	0.40	19.00	3.57	46.5	21.35	160.84	413.64
5.8	3.8	8	0.63	0.50	0.40	19.00	3.57	47.8	21.35	166.21	415.48
5.9	3.9	8	0.63	0.50	0.40	19.00	3.57	49.0	21.35	171.58	417.31
6.0	4.0	8	0.63	0.50	0.40	19.00	3.57	50.3	21.35	176.94	419.14
6.1	4.1	8	0.63	0.50	0.40	19.00	3.57	51.5	21.35	182.31	420.98
6.2	4.2	8	0.63	0.50	0.40	19.00	3.57	52.8	21.35	187.67	422.81
6.3	4.3	8	0.63	0.50	0.40	19.00	3.57	54.0	21.35	193.04	424.64
6.4	4.4	8	0.63	0.50	0.40	19.00	3.57	55.3	21.35	198.41	426.47
6.5	4.5	8	0.63	0.50	0.40	19.00	3.57	56.5	21.35	203.77	428.31
6.6	4.6	8	0.63	0.50	0.40	19.00	3.57	57.8	21.35	209.14	430.14
6.7	4.7	8	0.63	0.50	0.40	19.00	3.57	59.1	21.35	214.51	431.97
6.8	4.8	8	0.63	0.50	0.40	19.00	3.57	60.3	21.35	219.87	433.81
6.9	4.9	8	0.63	0.50	0.40	19.00	3.57	61.6	21.35	225.24	435.64
7.0	5.0	8	0.63	0.50	0.40	19.00	3.57	62.8	21.35	230.61	437.47
7.1	5.1	8	0.63	0.50	0.40	19.00	3.57	64.1	21.35	235.97	439.31
7.2	5.2	8	0.63	0.50	0.40	19.00	3.57	65.3	21.35	241.34	441.14
7.3	5.3	8	0.63	0.50	0.40	19.00	3.57	66.6	21.35	246.70	442.97
7.4	5.4	8	0.63	0.50	0.40	19.00	3.57	67.9	21.35	252.07	444.80
7.5	5.5	8	0.63	0.50	0.40	19.00	3.57	69.1	21.35	257.44	446.64
7.6	5.6	8	0.63	0.50	0.40	19.00	3.57	70.4	21.35	262.80	448.47
7.7	5.7	8	0.63	0.50	0.40	19.00	3.57	71.6	21.35	268.17	450.30
7.8	5.8	8	0.63	0.50	0.40	19.00	3.57	72.9	21.35	273.54	452.14
7.9	5.9	8	0.63	0.50	0.40	19.00	3.57	74.1	21.35	278.90	453.97
8.0	6.0	8	0.63	0.50	0.40	19.00	3.57	75.4	21.35	284.27	455.80
8.1	6.1	8	0.63	0.50	0.40	19.00	3.57	76.7	21.35	289.64	457.64
8.2	6.2	8	0.63	0.50	0.40	19.00	3.57	77.9	21.35	295.00	459.47
8.3	6.3	8	0.63	0.50	0.40	19.00	3.57	79.2	21.35	300.37	461.30
8.4	6.4	8	0.63	0.50	0.40	19.00	3.57	80.4	21.35	305.73	463.13
8.5	6.5	8	0.63	0.50	0.40	19.00	3.56	81.7	21.35	311.10	464.97
8.6	6.6	8	0.63	0.50	0.40	19.00	3.56	82.9	21.35	316.47	466.80
8.7	6.7	8	0.63	0.50	0.40	19.00	3.56	84.2	21.35	321.83	468.63
8.8	6.8	8	0.63	0.50	0.40	19.00	3.56	85.5	21.35	327.20	470.47
8.9	6.9	8	0.63	0.50	0.40	19.00	3.55	86.7	21.35	332.57	472.30

9.0	7.0	8	0.63	0.50	0.40	19.00	3.55	88.0	21.35	337.93	474.13
9.1	7.1	8	0.63	0.50	0.40	19.00	3.55	89.2	21.35	343.30	475.97
9.2	7.2	8	0.63	0.50	0.40	19.00	3.54	90.5	21.35	348.67	477.80
9.3	7.3	8	0.63	0.50	0.40	19.00	3.54	91.7	21.35	354.03	479.63
9.4	7.4	8	0.63	0.50	0.40	19.00	3.54	93.0	21.35	359.40	481.46
9.5	7.5	8	0.63	0.50	0.40	19.00	3.53	94.2	21.35	364.76	483.30
9.6	7.6	8	0.63	0.50	0.40	19.00	3.53	95.5	21.35	370.13	485.13
9.7	7.7	8	0.63	0.50	0.40	19.00	3.53	96.8	21.35	375.50	486.96
9.8	7.8	8	0.63	0.50	0.40	19.00	3.52	98.0	21.35	380.86	488.80
9.9	7.9	8	0.63	0.50	0.40	19.00	3.52	99.3	21.35	386.23	490.63
10.0	8.0	8	0.63	0.50	0.40	19.00	3.52	100.5	21.35	391.60	492.46
10.1	8.1	9	0.70	0.50	0.83	36.55	40.04	101.8	40.93	401.88	3968.75
10.2	8.2	9	0.70	0.50	0.83	36.55	40.01	103.0	41.32	412.27	4004.35
10.3	8.3	9	0.70	0.50	0.83	36.55	39.99	104.3	41.72	422.75	4039.89
10.4	8.4	9	0.70	0.50	0.83	36.55	39.96	105.6	42.11	433.34	4075.36
10.5	8.5	10	0.70	0.50	0.00	0.00	0.00	106.8	0.00	433.34	0.00
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	108.1	0.00	433.34	0.00
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	109.3	0.00	433.34	0.00
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	110.6	0.00	433.34	0.00
10.9	8.9	10	0.70	0.50	0.00	0.00	0.00	111.8	0.00	433.34	0.00
11.0	9.0	10	0.70	0.50	0.00	0.00	0.00	113.1	0.00	433.34	0.00
11.1	9.1	10	0.70	0.50	0.00	0.00	0.00	114.4	0.00	433.34	0.00
11.2	9.2	10	0.70	0.50	0.00	0.00	0.00	115.6	0.00	433.34	0.00
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	47.55	445.29	4928.49
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	47.96	457.34	4967.56
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	48.37	469.50	5006.56
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	48.79	481.76	5045.47
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	49.20	494.13	5084.30
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	49.61	506.59	5123.04
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.02	519.16	5161.70
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	50.43	531.84	5200.27
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	50.84	544.61	5238.75
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	51.25	557.49	5277.15
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	51.66	570.48	5315.46
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.07	583.56	5353.68
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	52.48	596.75	5391.81
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	52.89	610.04	5429.86
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	53.30	623.44	5467.81
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	53.71	636.94	5505.67
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	54.12	650.54	5543.44
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	54.53	664.24	5581.11
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	54.94	678.05	5618.70
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	55.35	691.96	5656.18
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	55.76	705.98	5693.58
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	56.17	720.09	5730.87
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	56.58	734.31	5768.08
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	56.99	748.64	5805.18

	13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	57.40	763.06	5842.19
	13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	57.81	777.59	5879.09
	13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	58.22	792.23	5915.90
	14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	58.63	806.96	5952.61
	14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.04	821.80	5989.22
	14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	59.45	836.74	6025.73
	14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	59.86	851.79	6062.13
	14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	60.27	866.94	6098.44
	14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	60.68	882.19	6134.63
	14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.09	897.54	6170.73
	14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	61.50	913.00	6206.72
	14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	61.91	928.56	6242.60
	14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.32	944.22	6280.72
	15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	62.73	959.99	6318.80
	15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.15	975.86	6356.84
	15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	63.56	991.84	6394.84
	15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	63.97	1007.91	6432.79
	15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.38	1024.09	6470.71
	15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	64.79	1040.37	6508.58
	15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.20	1056.76	6546.42
	15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	65.61	1073.25	6584.21
	15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.02	1089.84	6621.96
	15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.43	1106.53	6659.67
	16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	66.84	1123.33	6697.35
	16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.25	1140.23	6734.98
	16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	67.66	1157.24	6772.56
	16.3	14.3	11	0.70	0.50	0.86	37.70	43.03	179.7	68.07	1174.35	6810.11
	16.4	14.4	11	0.70	0.50	0.86	37.70	43.01	181.0	68.48	1191.56	6847.62
	16.5	14.5	11	0.70	0.50	0.86	37.70	42.98	182.2	68.89	1208.87	6885.09
	16.6	14.6	11	0.70	0.50	0.86	37.70	42.96	183.5	69.30	1226.29	6922.51
	16.7	14.7	11	0.70	0.50	0.86	37.70	42.94	184.7	69.71	1243.81	6959.90
	16.8	14.8	11	0.70	0.50	0.86	37.70	42.92	186.0	70.12	1261.43	6997.25
	16.9	14.9	11	0.70	0.50	0.86	37.70	42.89	187.2	70.53	1279.16	7034.55
	17.0	15.0	11	0.70	0.50	0.86	37.70	42.87	188.5	70.94	1296.99	7071.82

1.2.4 Calcolo del carico limite con riferimento alla prova CPTu1

1.2.4.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	1.5	19.35	36		0.70	0.50	0.73
2	1.5	2.0	18.33	22	16	0.70	0.50	0.40
3	2.0	4.1	19.35	36		0.70	0.50	0.73
4	4.1	4.8	18.33	22	25	0.70	0.50	0.40
5	4.8	5.8	19.35	36		0.70	0.50	0.71
6	5.8	7.8	18.33	22	35	0.62	0.50	0.40
7	7.8	8.7	19.35	38		0.70	0.50	0.79
8	8.7	10.5	18.33	22	40	0.58	0.50	0.40
9	10.5	11.8	19.35	36		0.70	0.50	0.73
10	11.8	16.3	19.35	43		0.70	0.50	0.93
11	16.3	16.6	19.35	38		0.70	0.50	0.79
12	16.6	18.7	19.35	41		0.70	0.50	0.86
13	18.7	18.9	19.35	36		0.70	0.50	0.73
14	18.9	20.4	19.35	41		0.70	0.50	0.86
15	20.4	21.0	19.35	36		0.70	0.50	0.73
16	21.0	21.3	19.35	41		0.70	0.50	0.86
17	21.3	24.0	19.35	36		0.70	0.50	0.73

1.2.4.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	2149	2073

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	2.8	10.70	4.03	821.24	928.80	6.05	10.70	4.03	821.24	928.80	6.05
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	5.7	11.04	8.20	847.95	959.01	12.21	11.04	8.20	847.95	959.01	12.21
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	8.5	11.39	12.49	874.66	989.22	18.47	11.39	12.49	874.66	989.22	18.47
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	11.3	11.74	16.92	901.37	1019.42	24.84	11.74	16.92	901.37	1019.42	24.84
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	14.1	12.09	21.47	928.08	1049.63	31.31	12.09	21.47	928.08	1049.63	31.31
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	17.0	12.43	26.16	954.79	1079.84	37.89	12.43	26.16	954.79	1079.84	37.89
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	19.8	12.78	30.98	981.49	1110.04	44.57	12.78	30.98	981.49	1110.04	44.57
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	22.6	13.13	35.93	1008.20	1140.25	51.36	13.13	35.93	1008.20	1140.25	51.36
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	25.4	13.48	41.01	1034.91	1170.46	58.25	13.48	41.01	1034.91	1170.46	58.25
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	28.3	13.83	46.22	1061.62	1200.66	65.25	13.83	46.22	1061.62	1200.66	65.25
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	31.1	14.17	51.56	1088.33	1230.87	72.35	14.17	51.56	1088.33	1230.87	72.35
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	33.9	14.52	57.04	1115.04	1261.08	79.56	14.52	57.04	1115.04	1261.08	79.56
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	36.8	14.87	62.64	1141.75	1291.28	86.87	14.87	62.64	1141.75	1291.28	86.87
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	39.6	15.22	68.38	1168.45	1321.49	94.29	15.22	68.38	1168.45	1321.49	94.29
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	42.4	15.57	74.25	1195.16	1351.70	101.81	15.57	74.25	1195.16	1351.70	101.81
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	45.2	15.91	80.25	1221.87	1381.90	109.44	15.91	80.25	1221.87	1381.90	109.44
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	48.1	16.26	86.38	1248.58	1412.11	117.17	16.26	86.38	1248.58	1412.11	117.17
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	50.9	16.61	92.64	1275.29	1442.32	125.01	16.61	92.64	1275.29	1442.32	125.01
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	53.7	16.96	99.03	1302.00	1472.52	132.95	16.96	99.03	1302.00	1472.52	132.95
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	56.5	17.30	105.56	1328.70	1502.73	140.99	17.30	105.56	1328.70	1502.73	140.99
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	59.4	17.65	112.21	1355.41	1532.94	149.14	17.65	112.21	1355.41	1532.94	149.14
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	62.2	17.50	118.81	305.66	345.69	157.25	9.95	115.96	175.74	198.76	154.97

Breve termine

Lungo termine

Palo

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	65.0	17.50	125.41	307.49	347.76	165.36	10.12	119.78	178.78	202.20	160.85
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	67.9	17.50	132.00	309.32	349.84	173.46	10.30	123.66	181.82	205.64	166.79
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	70.7	17.50	138.60	311.16	351.91	181.57	10.47	127.61	184.86	209.07	172.77
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	73.5	17.50	145.20	312.99	353.98	189.67	10.64	131.62	187.90	212.51	178.81
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	76.3	17.50	151.79	314.82	356.06	197.78	10.81	135.70	190.94	215.95	184.90
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	79.2	17.50	158.39	316.66	358.13	205.88	10.99	139.84	193.98	219.39	191.04
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	82.0	19.75	165.84	1451.54	1641.65	214.67	19.75	147.28	1451.54	1641.65	199.82
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	84.8	20.09	173.41	1476.57	1669.96	223.55	20.09	154.86	1476.57	1669.96	208.71
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	87.7	20.43	181.12	1501.59	1698.26	232.54	20.43	162.56	1501.59	1698.26	217.70
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	90.5	20.77	188.95	1526.62	1726.57	241.64	20.77	170.39	1526.62	1726.57	226.79
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	93.3	21.11	196.91	1551.65	1754.87	250.83	21.11	178.35	1551.65	1754.87	235.99
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	96.1	21.45	205.00	1576.67	1783.18	260.13	21.45	186.44	1576.67	1783.18	245.29
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	99.0	21.80	213.21	1601.70	1811.48	269.53	21.80	194.66	1601.70	1811.48	254.69
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	101.8	22.14	221.56	1626.73	1839.78	279.03	22.14	203.00	1626.73	1839.78	264.19
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	104.6	22.48	230.03	1651.75	1868.09	288.64	22.48	211.48	1651.75	1868.09	273.80
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	107.4	22.82	238.63	1676.78	1896.39	298.35	22.82	220.08	1676.78	1896.39	283.51
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	110.3	21.70	246.81	427.84	483.87	307.72	13.08	225.01	231.05	261.31	290.28
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	113.1	21.70	254.99	429.67	485.95	317.09	13.26	230.01	234.09	264.75	297.10
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	115.9	21.70	263.18	431.51	488.02	326.47	13.43	235.07	237.13	268.19	303.98
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	118.8	21.70	271.36	433.34	490.09	335.84	13.60	240.20	240.17	271.62	310.91
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	121.6	21.70	279.54	435.17	492.17	345.21	13.77	245.39	243.21	275.06	317.89
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	124.4	21.70	287.72	437.00	494.24	354.58	13.94	250.65	246.25	278.50	324.93
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	127.2	21.70	295.90	438.84	496.31	363.95	14.12	255.97	249.29	281.94	332.01
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	130.1	21.70	304.08	440.67	498.39	373.33	14.29	261.36	252.32	285.37	339.15
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	132.9	21.70	312.26	442.50	500.46	382.70	14.46	266.81	255.36	288.81	346.34
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	135.7	21.70	320.44	444.34	502.53	392.07	14.63	272.33	258.40	292.25	353.58
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	138.5	21.70	328.62	446.17	504.61	401.44	14.81	277.91	261.44	295.68	360.87
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	141.4	21.70	336.80	448.00	506.68	410.81	14.98	283.55	264.48	299.12	368.21
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	144.2	21.70	344.98	449.84	508.75	420.19	15.15	289.26	267.52	302.56	375.61
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	147.0	21.70	353.16	451.67	510.82	429.56	15.32	295.04	270.56	306.00	383.06
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	149.9	21.70	361.34	453.50	512.90	438.93	15.49	300.88	273.60	309.43	390.56
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	152.7	21.70	369.52	455.33	514.97	448.30	15.67	306.79	276.64	312.87	398.11
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	155.5	21.70	377.71	457.17	517.04	457.67	15.84	312.76	279.68	316.31	405.72
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	158.3	21.70	385.89	459.00	519.12	467.05	16.01	318.79	282.72	319.75	413.37
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	161.2	21.70	394.07	460.83	521.19	476.42	16.18	324.90	285.76	323.18	421.08
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	164.0	21.70	402.25	462.67	523.26	485.79	16.35	331.06	288.80	326.62	428.84
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	166.8	32.46	414.49	2942.62	3328.03	498.41	32.46	343.30	2942.62	3328.03	441.46
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	169.6	32.84	426.87	2976.90	3366.79	511.14	32.84	355.68	2976.90	3366.79	454.19
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	172.5	33.22	439.39	3011.17	3405.55	523.98	33.22	368.20	3011.17	3405.55	467.03
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	175.3	33.60	452.05	3045.44	3444.31	536.94	33.60	380.87	3045.44	3444.31	479.99
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	178.1	33.97	464.86	3079.71	3483.07	550.02	33.97	393.67	3079.71	3483.07	493.07
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	181.0	34.35	477.81	3113.98	3521.83	563.20	34.35	406.62	3113.98	3521.83	506.26
8.5	6.5	7	0.70	0.50	0.79	35.40	35.92	183.8	34.73	490.90	3148.25	3560.59	576.51	34.73	419.72	3148.25	3560.59	519.56
8.6	6.6	7	0.70	0.50	0.79	35.40	35.92	186.6	35.11	504.14	3182.53	3599.35	589.92	35.11	432.95	3182.53	3599.35	532.97
8.7	6.7	7	0.70	0.50	0.79	35.40	35.92	189.4	35.49	517.52	3216.80	3638.11	603.45	35.49	446.33	3216.80	3638.11	546.50
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	192.3	23.20	526.26	526.91	595.93	613.28	18.26	453.21	322.46	364.70	554.84
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	195.1	23.20	535.01	528.75	598.00	623.10	18.43	460.16	325.50	368.13	563.22

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	197.9	23.20	543.76	530.58	600.07	632.92	18.61	467.18	328.54	371.57	571.66
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	200.7	23.20	552.50	532.41	602.14	642.75	18.78	474.26	331.58	375.01	580.15
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	203.6	23.20	561.25	534.25	604.22	652.57	18.95	481.40	334.62	378.45	588.70
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	206.4	23.20	569.99	536.08	606.29	662.40	19.12	488.61	337.66	381.88	597.29
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	209.2	23.20	578.74	537.91	608.36	672.22	19.29	495.88	340.70	385.32	605.94
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	212.1	23.20	587.49	539.75	610.44	682.05	19.47	503.22	343.74	388.76	614.63
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	214.9	23.20	596.23	541.58	612.51	691.87	19.64	510.62	346.78	392.20	623.38
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	217.7	23.20	604.98	543.41	614.58	701.70	19.81	518.09	349.82	395.63	632.19
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	220.5	23.20	613.73	545.24	616.66	711.52	19.98	525.63	352.86	399.07	641.04
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	223.4	23.20	622.47	547.08	618.73	721.34	20.15	533.22	355.90	402.51	649.95
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	226.2	23.20	631.22	548.91	620.80	731.17	20.33	540.89	358.93	405.95	658.90
10.1	8.1	8	0.58	0.50	0.40	19.00	3.57	229.0	23.20	639.96	550.74	622.88	740.99	20.50	548.62	361.97	409.38	667.91
10.2	8.2	8	0.58	0.50	0.40	19.00	3.57	231.8	23.20	648.71	552.58	624.95	750.82	20.67	556.41	365.01	412.82	676.98
10.3	8.3	8	0.58	0.50	0.40	19.00	3.57	234.7	23.20	657.46	554.41	627.02	760.64	20.84	564.27	368.05	416.26	686.09
10.4	8.4	8	0.58	0.50	0.40	19.00	3.57	237.5	23.20	666.20	556.24	629.09	770.47	21.02	572.19	371.09	419.70	695.25
10.5	8.5	8	0.58	0.50	0.40	19.00	3.57	240.3	23.20	674.95	558.08	631.17	780.29	21.19	580.18	374.13	423.13	704.47
10.6	8.6	9	0.70	0.50	0.73	33.10	28.00	243.2	38.59	689.50	2962.96	3351.03	794.76	38.59	594.72	2962.96	3351.03	718.94
10.7	8.7	9	0.70	0.50	0.73	33.10	28.00	246.0	38.94	704.17	2989.67	3381.24	809.33	38.94	609.40	2989.67	3381.24	733.51
10.8	8.8	9	0.70	0.50	0.73	33.10	28.00	248.8	39.28	718.98	3016.38	3411.44	824.00	39.28	624.21	3016.38	3411.44	748.18
10.9	8.9	9	0.70	0.50	0.73	33.10	28.00	251.6	39.63	733.92	3043.09	3441.65	838.78	39.63	639.15	3043.09	3441.65	762.96
11.0	9.0	9	0.70	0.50	0.73	33.10	28.00	254.5	39.98	749.00	3069.79	3471.86	853.67	39.98	654.22	3069.79	3471.86	777.85
11.1	9.1	9	0.70	0.50	0.73	33.10	28.00	257.3	40.33	764.20	3096.50	3502.06	868.66	40.33	669.43	3096.50	3502.06	792.84
11.2	9.2	9	0.70	0.50	0.73	33.10	28.00	260.1	40.67	779.53	3123.21	3532.27	883.75	40.67	684.76	3123.21	3532.27	807.93
11.3	9.3	9	0.70	0.50	0.73	33.10	28.00	263.0	41.02	795.00	3149.92	3562.48	898.95	41.02	700.22	3149.92	3562.48	823.13
11.4	9.4	9	0.70	0.50	0.73	33.10	28.00	265.8	41.37	810.59	3176.63	3592.68	914.25	41.37	715.82	3176.63	3592.68	838.44
11.5	9.5	9	0.70	0.50	0.73	33.10	28.00	268.6	41.72	826.32	3203.34	3622.89	929.66	41.72	731.55	3203.34	3622.89	853.84
11.6	9.6	9	0.70	0.50	0.73	33.10	28.00	271.4	42.07	842.18	3230.05	3653.10	945.18	42.07	747.41	3230.05	3653.10	869.36
11.7	9.7	9	0.70	0.50	0.73	33.10	27.98	274.3	42.41	858.17	3255.43	3681.81	960.80	42.41	763.40	3255.43	3681.81	884.98
11.8	9.8	9	0.70	0.50	0.73	33.10	27.97	277.1	42.76	874.29	3280.79	3710.49	976.52	42.76	779.52	3280.79	3710.49	900.70
11.9	9.9	10	0.70	0.50	0.93	40.00	56.47	279.9	55.13	895.07	6677.32	7551.88	995.97	55.13	800.30	6677.32	7551.88	920.16
12.0	10.0	10	0.70	0.50	0.93	40.00	56.45	282.7	55.57	916.02	6728.80	7610.09	1015.56	55.57	821.25	6728.80	7610.09	939.74
12.1	10.1	10	0.70	0.50	0.93	40.00	56.43	285.6	56.02	937.14	6780.23	7668.25	1035.28	56.02	842.37	6780.23	7668.25	959.47
12.2	10.2	10	0.70	0.50	0.93	40.00	56.41	288.4	56.46	958.43	6831.60	7726.36	1055.14	56.46	863.66	6831.60	7726.36	979.32
12.3	10.3	10	0.70	0.50	0.93	40.00	56.39	291.2	56.91	979.88	6882.92	7784.40	1075.13	56.91	885.11	6882.92	7784.40	999.31
12.4	10.4	10	0.70	0.50	0.93	40.00	56.37	294.1	57.35	1001.50	6934.19	7842.38	1095.26	57.35	906.73	6934.19	7842.38	1019.44
12.5	10.5	10	0.70	0.50	0.93	40.00	56.35	296.9	57.80	1023.29	6985.40	7900.31	1115.51	57.80	928.52	6985.40	7900.31	1039.70
12.6	10.6	10	0.70	0.50	0.93	40.00	56.33	299.7	58.24	1045.25	7036.57	7958.17	1135.91	58.24	950.48	7036.57	7958.17	1060.09
12.7	10.7	10	0.70	0.50	0.93	40.00	56.31	302.5	58.69	1067.37	7087.68	8015.97	1156.43	58.69	972.60	7087.68	8015.97	1080.62
12.8	10.8	10	0.70	0.50	0.93	40.00	56.29	305.4	59.13	1089.67	7138.73	8073.72	1177.10	59.13	994.89	7138.73	8073.72	1101.28
12.9	10.9	10	0.70	0.50	0.93	40.00	56.27	308.2	59.58	1112.13	7189.73	8131.40	1197.89	59.58	1017.35	7189.73	8131.40	1122.07
13.0	11.0	10	0.70	0.50	0.93	40.00	56.25	311.0	60.02	1134.75	7240.68	8189.02	1218.82	60.02	1039.98	7240.68	8189.02	1143.00
13.1	11.1	10	0.70	0.50	0.93	40.00	56.23	313.8	60.47	1157.55	7291.57	8246.58	1239.88	60.47	1062.78	7291.57	8246.58	1164.07
13.2	11.2	10	0.70	0.50	0.93	40.00	56.20	316.7	60.91	1180.51	7342.41	8304.07	1261.08	60.91	1085.74	7342.41	8304.07	1185.26
13.3	11.3	10	0.70	0.50	0.93	40.00	56.18	319.5	61.36	1203.64	7393.19	8361.50	1282.41	61.36	1108.87	7393.19	8361.50	1206.59
13.4	11.4	10	0.70	0.50	0.93	40.00	56.16	322.3	61.80	1226.94	7443.92	8418.87	1303.88	61.80	1132.17	7443.92	8418.87	1228.06
13.5	11.5	10	0.70	0.50	0.93	40.00	56.14	325.2	62.25	1250.41	7494.59	8476.18	1325.48	62.25	1155.63	7494.59	8476.18	1249.66
13.6	11.6	10	0.70	0.50	0.93	40.00	56.12	328.0	62.69	1274.04	7545.20	8533.42	1347.21	62.69	1179.27	7545.20	8533.42	1271.40

13.7	11.7	10	0.70	0.50	0.93	40.00	56.10	330.8	63.14	1297.84	7595.76	8590.60	1369.08	63.14	1203.07	7595.76	8590.60	1293.26
13.8	11.8	10	0.70	0.50	0.93	40.00	56.07	333.6	63.58	1321.81	7646.26	8647.71	1391.09	63.58	1227.04	7646.26	8647.71	1315.27
13.9	11.9	10	0.70	0.50	0.93	40.00	56.05	336.5	64.02	1345.95	7696.70	8704.76	1413.22	64.02	1251.17	7696.70	8704.76	1337.40
14.0	12.0	10	0.70	0.50	0.93	40.00	56.03	339.3	64.47	1370.25	7747.08	8761.74	1435.49	64.47	1275.48	7747.08	8761.74	1359.67
14.1	12.1	10	0.70	0.50	0.93	40.00	56.01	342.1	64.91	1394.72	7797.41	8818.66	1457.90	64.91	1299.95	7797.41	8818.66	1382.08
14.2	12.2	10	0.70	0.50	0.93	40.00	55.98	344.9	65.36	1419.36	7847.67	8875.51	1480.44	65.36	1324.59	7847.67	8875.51	1404.62
14.3	12.3	10	0.70	0.50	0.93	40.00	55.96	347.8	65.80	1444.17	7897.88	8932.29	1503.11	65.80	1349.40	7897.88	8932.29	1427.29
14.4	12.4	10	0.70	0.50	0.93	40.00	55.94	350.6	66.25	1469.15	7948.03	8989.01	1525.92	66.25	1374.37	7948.03	8989.01	1450.10
14.5	12.5	10	0.70	0.50	0.93	40.00	55.92	353.4	66.69	1494.29	7998.12	9045.66	1548.86	66.69	1399.52	7998.12	9045.66	1473.04
14.6	12.6	10	0.70	0.50	0.93	40.00	55.89	356.3	67.14	1519.60	8048.15	9102.24	1571.94	67.14	1424.83	8048.15	9102.24	1496.12
14.7	12.7	10	0.70	0.50	0.93	40.00	55.87	359.1	67.58	1545.08	8098.12	9158.75	1595.15	67.58	1450.30	8098.12	9158.75	1519.33
14.8	12.8	10	0.70	0.50	0.93	40.00	55.85	361.9	68.03	1570.72	8148.02	9215.20	1618.49	68.03	1475.95	8148.02	9215.20	1542.67
14.9	12.9	10	0.70	0.50	0.93	40.00	55.82	364.7	68.47	1596.54	8197.87	9271.57	1641.97	68.47	1501.76	8197.87	9271.57	1566.15
15.0	13.0	10	0.70	0.50	0.93	40.00	55.80	367.6	68.92	1622.52	8247.65	9327.88	1665.58	68.92	1527.74	8247.65	9327.88	1589.76
15.1	13.1	10	0.70	0.50	0.93	40.00	55.78	370.4	69.36	1648.67	8297.38	9384.11	1689.33	69.36	1553.89	8297.38	9384.11	1613.51
15.2	13.2	10	0.70	0.50	0.93	40.00	55.75	373.2	69.81	1674.98	8347.04	9440.28	1713.21	69.81	1580.21	8347.04	9440.28	1637.39
15.3	13.3	10	0.70	0.50	0.93	40.00	55.73	376.0	70.25	1701.47	8396.64	9496.37	1737.22	70.25	1606.70	8396.64	9496.37	1661.40
15.4	13.4	10	0.70	0.50	0.93	40.00	55.70	378.9	70.70	1728.12	8446.17	9552.40	1761.37	70.70	1633.35	8446.17	9552.40	1685.55
15.5	13.5	10	0.70	0.50	0.93	40.00	55.68	381.7	71.14	1754.94	8495.64	9608.35	1785.66	71.14	1660.17	8495.64	9608.35	1709.84
15.6	13.6	10	0.70	0.50	0.93	40.00	55.66	384.5	71.59	1781.93	8545.05	9664.23	1810.07	71.59	1687.15	8545.05	9664.23	1734.25
15.7	13.7	10	0.70	0.50	0.93	40.00	55.63	387.4	72.03	1809.08	8594.40	9720.03	1834.62	72.03	1714.31	8594.40	9720.03	1758.81
15.8	13.8	10	0.70	0.50	0.93	40.00	55.61	390.2	72.48	1836.41	8643.68	9775.77	1859.31	72.48	1741.63	8643.68	9775.77	1783.49
15.9	13.9	10	0.70	0.50	0.93	40.00	55.58	393.0	72.92	1863.90	8692.89	9831.43	1884.13	72.92	1769.12	8692.89	9831.43	1808.31
16.0	14.0	10	0.70	0.50	0.93	40.00	55.56	395.8	73.37	1891.55	8742.04	9887.02	1909.08	73.37	1796.78	8742.04	9887.02	1833.27
16.1	14.1	10	0.70	0.50	0.93	40.00	55.53	398.7	73.81	1919.38	8791.13	9942.53	1934.17	73.81	1824.61	8791.13	9942.53	1858.35
16.2	14.2	10	0.70	0.50	0.93	40.00	55.51	401.5	74.26	1947.37	8840.15	9997.97	1959.39	74.26	1852.60	8840.15	9997.97	1883.58
16.3	14.3	10	0.70	0.50	0.93	40.00	55.48	404.3	74.70	1975.54	8889.10	10053.34	1984.75	74.70	1880.76	8889.10	10053.34	1908.93
16.4	14.4	11	0.70	0.50	0.79	35.40	35.18	407.2	63.87	1999.61	5669.89	6412.50	2006.84	63.87	1904.84	5669.89	6412.50	1931.02
16.5	14.5	11	0.70	0.50	0.79	35.40	35.16	410.0	64.25	2023.83	5700.66	6447.30	2029.04	64.25	1929.06	5700.66	6447.30	1953.23
16.6	14.6	11	0.70	0.50	0.79	35.40	35.15	412.8	64.63	2048.20	5731.38	6482.04	2051.36	64.63	1953.42	5731.38	6482.04	1975.54
16.7	14.7	12	0.70	0.50	0.86	37.70	44.42	415.6	70.54	2074.79	7285.35	8239.54	2075.47	70.54	1980.02	7285.35	8239.54	1999.65
16.8	14.8	12	0.70	0.50	0.86	37.70	44.39	418.5	70.95	2101.54	7324.22	8283.49	2099.69	70.95	2006.77	7324.22	8283.49	2023.87
16.9	14.9	12	0.70	0.50	0.86	37.70	44.37	421.3	71.36	2128.44	7363.02	8327.38	2124.04	71.36	2033.67	7363.02	8327.38	2048.22
17.0	15.0	12	0.70	0.50	0.86	37.70	44.35	424.1	71.77	2155.50	7401.77	8371.21	2148.52	71.77	2060.73	7401.77	8371.21	2072.70

1.2.4.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1732	1668

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	2.0	10.70	3.36	821.24	645.00	4.65	10.70	3.36	821.24	645.00	4.65
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	3.9	11.04	6.83	847.95	665.98	9.39	11.04	6.83	847.95	665.98	9.39
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	5.9	11.39	10.41	874.66	686.96	14.22	11.39	10.41	874.66	686.96	14.22
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	7.9	11.74	14.10	901.37	707.93	19.13	11.74	14.10	901.37	707.93	19.13
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	9.8	12.09	17.89	928.08	728.91	24.13	12.09	17.89	928.08	728.91	24.13
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	11.8	12.43	21.80	954.79	749.89	29.22	12.43	21.80	954.79	749.89	29.22
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	13.7	12.78	25.82	981.49	770.86	34.40	12.78	25.82	981.49	770.86	34.40
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	15.7	13.13	29.94	1008.20	791.84	39.66	13.13	29.94	1008.20	791.84	39.66
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	17.7	13.48	34.17	1034.91	812.82	45.01	13.48	34.17	1034.91	812.82	45.01
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	19.6	13.83	38.52	1061.62	833.79	50.45	13.83	38.52	1061.62	833.79	50.45
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	21.6	14.17	42.97	1088.33	854.77	55.97	14.17	42.97	1088.33	854.77	55.97
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	23.6	14.52	47.53	1115.04	875.75	61.59	14.52	47.53	1115.04	875.75	61.59
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	25.5	14.87	52.20	1141.75	896.72	67.29	14.87	52.20	1141.75	896.72	67.29
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	27.5	15.22	56.98	1168.45	917.70	73.08	15.22	56.98	1168.45	917.70	73.08
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	29.5	15.57	61.87	1195.16	938.68	78.95	15.57	61.87	1195.16	938.68	78.95
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	31.4	15.91	66.87	1221.87	959.65	84.91	15.91	66.87	1221.87	959.65	84.91
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	33.4	16.26	71.98	1248.58	980.63	90.97	16.26	71.98	1248.58	980.63	90.97
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	35.3	16.61	77.20	1275.29	1001.61	97.10	16.61	77.20	1275.29	1001.61	97.10
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	37.3	16.96	82.53	1302.00	1022.59	103.33	16.96	82.53	1302.00	1022.59	103.33
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	39.3	17.30	87.96	1328.70	1043.56	109.64	17.30	87.96	1328.70	1043.56	109.64
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	41.2	17.65	93.51	1355.41	1064.54	116.04	17.65	93.51	1355.41	1064.54	116.04
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	43.2	17.50	99.01	305.66	240.06	122.40	9.95	96.64	175.74	138.03	120.51

Breve termine

Lungo termine

Palo

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	45.2	17.50	104.50	307.49	241.50	128.76	10.12	99.82	178.78	140.42	125.01
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	47.1	17.50	110.00	309.32	242.94	135.13	10.30	103.05	181.82	142.80	129.56
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	49.1	17.50	115.50	311.16	244.38	141.49	10.47	106.34	184.86	145.19	134.16
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	51.1	17.50	121.00	312.99	245.82	147.85	10.64	109.68	187.90	147.58	138.80
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	53.0	17.50	126.50	314.82	247.26	154.21	10.81	113.08	190.94	149.96	143.48
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	55.0	17.50	131.99	316.66	248.70	160.57	10.99	116.53	193.98	152.35	148.20
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	56.9	19.75	138.20	1451.54	1140.04	167.50	19.75	122.74	1451.54	1140.04	155.13
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	58.9	20.09	144.51	1476.57	1159.69	174.51	20.09	129.05	1476.57	1159.69	162.14
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	60.9	20.43	150.93	1501.59	1179.35	181.61	20.43	135.47	1501.59	1179.35	169.24
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	62.8	20.77	157.46	1526.62	1199.01	188.80	20.77	141.99	1526.62	1199.01	176.43
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	64.8	21.11	164.09	1551.65	1218.66	196.07	21.11	148.63	1551.65	1218.66	183.70
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	66.8	21.45	170.83	1576.67	1238.32	203.42	21.45	155.37	1576.67	1238.32	191.05
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	68.7	21.80	177.68	1601.70	1257.97	210.86	21.80	162.21	1601.70	1257.97	198.49
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	70.7	22.14	184.63	1626.73	1277.63	218.39	22.14	169.17	1626.73	1277.63	206.02
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	72.6	22.48	191.69	1651.75	1297.28	226.00	22.48	176.23	1651.75	1297.28	213.63
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	74.6	22.82	198.86	1676.78	1316.94	233.70	22.82	183.40	1676.78	1316.94	221.33
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	76.6	21.70	205.68	427.84	336.02	241.12	13.08	187.51	231.05	181.47	226.58
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	78.5	21.70	212.50	429.67	337.46	248.54	13.26	191.67	234.09	183.85	231.88
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	80.5	21.70	219.31	431.51	338.90	255.95	13.43	195.89	237.13	186.24	237.22
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	82.5	21.70	226.13	433.34	340.34	263.37	13.60	200.17	240.17	188.63	242.60
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	84.4	21.70	232.95	435.17	341.78	270.79	13.77	204.49	243.21	191.01	248.02
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	86.4	21.70	239.76	437.00	343.22	278.21	13.94	208.87	246.25	193.40	253.49
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	88.4	21.70	246.58	438.84	344.66	285.62	14.12	213.31	249.29	195.79	259.00
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	90.3	21.70	253.40	440.67	346.10	293.04	14.29	217.80	252.32	198.18	264.56
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	92.3	21.70	260.22	442.50	347.54	300.46	14.46	222.34	255.36	200.56	270.16
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	94.2	21.70	267.03	444.34	348.98	307.87	14.63	226.94	258.40	202.95	275.80
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	96.2	21.70	273.85	446.17	350.42	315.29	14.81	231.59	261.44	205.34	281.48
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	98.2	21.70	280.67	448.00	351.86	322.71	14.98	236.29	264.48	207.72	287.21
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	100.1	21.70	287.49	449.84	353.30	330.13	15.15	241.05	267.52	210.11	292.98
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	102.1	21.70	294.30	451.67	354.74	337.54	15.32	245.87	270.56	212.50	298.80
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	104.1	21.70	301.12	453.50	356.18	344.96	15.49	250.73	273.60	214.88	304.65
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	106.0	21.70	307.94	455.33	357.62	352.38	15.67	255.66	276.64	217.27	310.55
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	108.0	21.70	314.75	457.17	359.06	359.80	15.84	260.63	279.68	219.66	316.50
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	110.0	21.70	321.57	459.00	360.50	367.21	16.01	265.66	282.72	222.05	322.49
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	111.9	21.70	328.39	460.83	361.94	374.63	16.18	270.75	285.76	224.43	328.52
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	113.9	21.70	335.21	462.67	363.38	382.05	16.35	275.88	288.80	226.82	334.59
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	115.8	32.46	345.40	2942.62	2311.13	392.17	32.46	286.08	2942.62	2311.13	344.71
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	117.8	32.84	355.72	2976.90	2338.05	402.39	32.84	296.40	2976.90	2338.05	354.93
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	119.8	33.22	366.16	3011.17	2364.97	412.70	33.22	306.83	3011.17	2364.97	365.24
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	121.7	33.60	376.71	3045.44	2391.88	423.11	33.60	317.39	3045.44	2391.88	375.65
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	123.7	33.97	387.38	3079.71	2418.80	433.61	33.97	328.06	3079.71	2418.80	386.15
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	125.7	34.35	398.18	3113.98	2445.72	444.20	34.35	338.85	3113.98	2445.72	396.75
8.5	6.5	7	0.70	0.50	0.79	35.40	35.92	127.6	34.73	409.09	3148.25	2472.63	454.90	34.73	349.76	3148.25	2472.63	407.44
8.6	6.6	7	0.70	0.50	0.79	35.40	35.92	129.6	35.11	420.12	3182.53	2499.55	465.68	35.11	360.79	3182.53	2499.55	418.23
8.7	6.7	7	0.70	0.50	0.79	35.40	35.92	131.6	35.49	431.26	3216.80	2526.47	476.57	35.49	371.94	3216.80	2526.47	429.11
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	133.5	23.20	438.55	526.91	413.84	484.36	18.26	377.68	322.46	253.26	435.66
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	135.5	23.20	445.84	528.75	415.28	492.15	18.43	383.47	325.50	255.65	442.26

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	137.4	23.20	453.13	530.58	416.72	499.95	18.61	389.31	328.54	258.04	448.90
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	139.4	23.20	460.42	532.41	418.16	507.74	18.78	395.21	331.58	260.42	455.58
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	141.4	23.20	467.71	534.25	419.60	515.54	18.95	401.17	334.62	262.81	462.31
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	143.3	23.20	475.00	536.08	421.04	523.33	19.12	407.17	337.66	265.20	469.07
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	145.3	23.20	482.28	537.91	422.48	531.13	19.29	413.24	340.70	267.58	475.89
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	147.3	23.20	489.57	539.75	423.91	538.92	19.47	419.35	343.74	269.97	482.74
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	149.2	23.20	496.86	541.58	425.35	546.71	19.64	425.52	346.78	272.36	489.64
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	151.2	23.20	504.15	543.41	426.79	554.51	19.81	431.74	349.82	274.75	496.58
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	153.2	23.20	511.44	545.24	428.23	562.30	19.98	438.02	352.86	277.13	503.57
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	155.1	23.20	518.73	547.08	429.67	570.10	20.15	444.35	355.90	279.52	510.60
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	157.1	23.20	526.01	548.91	431.11	577.89	20.33	450.74	358.93	281.91	517.67
10.1	8.1	8	0.58	0.50	0.40	19.00	3.56	159.0	23.20	533.30	550.74	432.55	585.69	20.50	457.18	361.73	284.10	524.79
10.2	8.2	8	0.58	0.50	0.40	19.00	3.56	161.0	23.20	540.59	552.58	433.99	593.48	20.67	463.67	364.52	286.29	531.95
10.3	8.3	8	0.58	0.50	0.40	19.00	3.56	163.0	23.20	547.88	554.41	435.43	601.27	20.84	470.22	367.30	288.48	539.15
10.4	8.4	8	0.58	0.50	0.40	19.00	3.56	164.9	23.20	555.17	556.24	436.87	609.07	21.02	476.82	370.08	290.66	546.39
10.5	8.5	8	0.58	0.50	0.40	19.00	3.56	166.9	23.20	562.46	558.08	438.31	616.86	21.19	483.48	372.85	292.84	553.68
10.6	8.6	9	0.70	0.50	0.73	33.10	27.91	168.9	38.59	574.58	2954.19	2320.21	628.52	38.59	495.60	2954.19	2320.21	565.34
10.7	8.7	9	0.70	0.50	0.73	33.10	27.90	170.8	38.94	586.81	2979.31	2339.95	640.27	38.94	507.83	2979.31	2339.95	577.09
10.8	8.8	9	0.70	0.50	0.73	33.10	27.89	172.8	39.28	599.15	3004.40	2359.65	652.11	39.28	520.18	3004.40	2359.65	588.93
10.9	8.9	9	0.70	0.50	0.73	33.10	27.87	174.8	39.63	611.60	3029.46	2379.33	664.03	39.63	532.63	3029.46	2379.33	600.85
11.0	9.0	9	0.70	0.50	0.73	33.10	27.86	176.7	39.98	624.16	3054.48	2398.98	676.05	39.98	545.19	3054.48	2398.98	612.86
11.1	9.1	9	0.70	0.50	0.73	33.10	27.84	178.7	40.33	636.83	3079.46	2418.60	688.14	40.33	557.85	3079.46	2418.60	624.96
11.2	9.2	9	0.70	0.50	0.73	33.10	27.83	180.6	40.67	649.61	3104.41	2438.20	700.33	40.67	570.63	3104.41	2438.20	637.15
11.3	9.3	9	0.70	0.50	0.73	33.10	27.81	182.6	41.02	662.50	3129.32	2457.76	712.60	41.02	583.52	3129.32	2457.76	649.42
11.4	9.4	9	0.70	0.50	0.73	33.10	27.80	184.6	41.37	675.50	3154.20	2477.30	724.96	41.37	596.52	3154.20	2477.30	661.78
11.5	9.5	9	0.70	0.50	0.73	33.10	27.78	186.5	41.72	688.60	3179.04	2496.81	737.41	41.72	609.62	3179.04	2496.81	674.23
11.6	9.6	9	0.70	0.50	0.73	33.10	27.77	188.5	42.07	701.82	3203.84	2516.29	749.95	42.07	622.84	3203.84	2516.29	686.77
11.7	9.7	9	0.70	0.50	0.73	33.10	27.75	190.5	42.41	715.14	3228.60	2535.74	762.57	42.41	636.16	3228.60	2535.74	699.39
11.8	9.8	9	0.70	0.50	0.73	33.10	27.74	192.4	42.76	728.58	3253.33	2555.16	775.28	42.76	649.60	3253.33	2555.16	712.10
11.9	9.9	10	0.70	0.50	0.93	40.00	56.06	194.4	55.13	745.89	6627.77	5205.44	791.10	55.13	666.92	6627.77	5205.44	727.92
12.0	10.0	10	0.70	0.50	0.93	40.00	56.03	196.3	55.57	763.35	6678.05	5244.93	807.03	55.57	684.38	6678.05	5244.93	743.85
12.1	10.1	10	0.70	0.50	0.93	40.00	56.00	198.3	56.02	780.95	6728.27	5284.37	823.07	56.02	701.97	6728.27	5284.37	759.89
12.2	10.2	10	0.70	0.50	0.93	40.00	55.97	200.3	56.46	798.69	6778.41	5323.75	839.23	56.46	719.71	6778.41	5323.75	776.05
12.3	10.3	10	0.70	0.50	0.93	40.00	55.95	202.2	56.91	816.57	6828.48	5363.07	855.49	56.91	737.59	6828.48	5363.07	792.31
12.4	10.4	10	0.70	0.50	0.93	40.00	55.92	204.2	57.35	834.59	6878.48	5402.34	871.87	57.35	755.61	6878.48	5402.34	808.69
12.5	10.5	10	0.70	0.50	0.93	40.00	55.89	206.2	57.80	852.74	6928.40	5441.55	888.36	57.80	773.77	6928.40	5441.55	825.18
12.6	10.6	10	0.70	0.50	0.93	40.00	55.86	208.1	58.24	871.04	6978.25	5480.71	904.96	58.24	792.06	6978.25	5480.71	841.78
12.7	10.7	10	0.70	0.50	0.93	40.00	55.84	210.1	58.69	889.48	7028.03	5519.80	921.68	58.69	810.50	7028.03	5519.80	858.49
12.8	10.8	10	0.70	0.50	0.93	40.00	55.81	212.1	59.13	908.06	7077.74	5558.84	938.50	59.13	829.08	7077.74	5558.84	875.32
12.9	10.9	10	0.70	0.50	0.93	40.00	55.78	214.0	59.58	926.77	7127.37	5597.82	955.44	59.58	847.79	7127.37	5597.82	892.26
13.0	11.0	10	0.70	0.50	0.93	40.00	55.75	216.0	60.02	945.63	7176.92	5636.74	972.49	60.02	866.65	7176.92	5636.74	909.30
13.1	11.1	10	0.70	0.50	0.93	40.00	55.72	217.9	60.47	964.62	7226.40	5675.60	989.65	60.47	885.65	7226.40	5675.60	926.46
13.2	11.2	10	0.70	0.50	0.93	40.00	55.69	219.9	60.91	983.76	7275.80	5714.40	1006.92	60.91	904.78	7275.80	5714.40	943.74
13.3	11.3	10	0.70	0.50	0.93	40.00	55.67	221.9	61.36	1003.04	7325.13	5753.14	1024.30	61.36	924.06	7325.13	5753.14	961.12
13.4	11.4	10	0.70	0.50	0.93	40.00	55.64	223.8	61.80	1022.45	7374.38	5791.82	1041.80	61.80	943.47	7374.38	5791.82	978.62
13.5	11.5	10	0.70	0.50	0.93	40.00	55.61	225.8	62.25	1042.01	7423.55	5830.44	1059.41	62.25	963.03	7423.55	5830.44	996.22
13.6	11.6	10	0.70	0.50	0.93	40.00	55.58	227.8	62.69	1061.70	7472.64	5869.00	1077.13	62.69	982.72	7472.64	5869.00	1013.94

13.7	11.7	10	0.70	0.50	0.93	40.00	55.55	229.7	63.14	1081.53	7521.65	5907.49	1094.96	63.14	1002.56	7521.65	5907.49	1031.77
13.8	11.8	10	0.70	0.50	0.93	40.00	55.52	231.7	63.58	1101.51	7570.59	5945.92	1112.90	63.58	1022.53	7570.59	5945.92	1049.72
13.9	11.9	10	0.70	0.50	0.93	40.00	55.49	233.7	64.02	1121.62	7619.44	5984.29	1130.95	64.02	1042.64	7619.44	5984.29	1067.77
14.0	12.0	10	0.70	0.50	0.93	40.00	55.46	235.6	64.47	1141.88	7668.21	6022.60	1149.12	64.47	1062.90	7668.21	6022.60	1085.94
14.1	12.1	10	0.70	0.50	0.93	40.00	55.43	237.6	64.91	1162.27	7716.91	6060.84	1167.40	64.91	1083.29	7716.91	6060.84	1104.22
14.2	12.2	10	0.70	0.50	0.93	40.00	55.40	239.5	65.36	1182.80	7765.52	6099.02	1185.79	65.36	1103.82	7765.52	6099.02	1122.61
14.3	12.3	10	0.70	0.50	0.93	40.00	55.37	241.5	65.80	1203.48	7814.05	6137.14	1204.29	65.80	1124.50	7814.05	6137.14	1141.11
14.4	12.4	10	0.70	0.50	0.93	40.00	55.34	243.5	66.25	1224.29	7862.49	6175.19	1222.90	66.25	1145.31	7862.49	6175.19	1159.72
14.5	12.5	10	0.70	0.50	0.93	40.00	55.31	245.4	66.69	1245.24	7910.86	6213.17	1241.63	66.69	1166.26	7910.86	6213.17	1178.45
14.6	12.6	10	0.70	0.50	0.93	40.00	55.27	247.4	67.14	1266.33	7959.13	6251.09	1260.47	67.14	1187.35	7959.13	6251.09	1197.28
14.7	12.7	10	0.70	0.50	0.93	40.00	55.24	249.4	67.58	1287.56	8007.33	6288.94	1279.42	67.58	1208.59	8007.33	6288.94	1216.23
14.8	12.8	10	0.70	0.50	0.93	40.00	55.21	251.3	68.03	1308.94	8055.44	6326.73	1298.48	68.03	1229.96	8055.44	6326.73	1235.29
14.9	12.9	10	0.70	0.50	0.93	40.00	55.18	253.3	68.47	1330.45	8103.46	6364.45	1317.65	68.47	1251.47	8103.46	6364.45	1254.47
15.0	13.0	10	0.70	0.50	0.93	40.00	55.15	255.3	68.92	1352.10	8151.40	6402.10	1336.93	68.92	1273.12	8151.40	6402.10	1273.75
15.1	13.1	10	0.70	0.50	0.93	40.00	55.12	257.2	69.36	1373.89	8199.26	6439.68	1356.33	69.36	1294.91	8199.26	6439.68	1293.15
15.2	13.2	10	0.70	0.50	0.93	40.00	55.08	259.2	69.81	1395.82	8247.02	6477.20	1375.84	69.81	1316.84	8247.02	6477.20	1312.66
15.3	13.3	10	0.70	0.50	0.93	40.00	55.05	261.1	70.25	1417.89	8294.70	6514.64	1395.46	70.25	1338.91	8294.70	6514.64	1332.27
15.4	13.4	10	0.70	0.50	0.93	40.00	55.02	263.1	70.70	1440.10	8342.29	6552.02	1415.19	70.70	1361.12	8342.29	6552.02	1352.01
15.5	13.5	10	0.70	0.50	0.93	40.00	54.99	265.1	71.14	1462.45	8389.79	6589.33	1435.03	71.14	1383.47	8389.79	6589.33	1371.85
15.6	13.6	10	0.70	0.50	0.93	40.00	54.95	267.0	71.59	1484.94	8437.20	6626.56	1454.99	71.59	1405.96	8437.20	6626.56	1391.80
15.7	13.7	10	0.70	0.50	0.93	40.00	54.92	269.0	72.03	1507.57	8484.52	6663.73	1475.05	72.03	1428.59	8484.52	6663.73	1411.87
15.8	13.8	10	0.70	0.50	0.93	40.00	54.89	271.0	72.48	1530.34	8531.76	6700.83	1495.23	72.48	1451.36	8531.76	6700.83	1432.05
15.9	13.9	10	0.70	0.50	0.93	40.00	54.85	272.9	72.92	1553.25	8578.90	6737.85	1515.52	72.92	1474.27	8578.90	6737.85	1452.34
16.0	14.0	10	0.70	0.50	0.93	40.00	54.82	274.9	73.37	1576.30	8625.94	6774.80	1535.93	73.37	1497.32	8625.94	6774.80	1472.74
16.1	14.1	10	0.70	0.50	0.93	40.00	54.79	276.9	73.81	1599.48	8672.90	6811.68	1556.44	73.81	1520.51	8672.90	6811.68	1493.26
16.2	14.2	10	0.70	0.50	0.93	40.00	54.75	278.8	74.26	1622.81	8719.77	6848.49	1577.07	74.26	1543.83	8719.77	6848.49	1513.88
16.3	14.3	10	0.70	0.50	0.93	40.00	54.72	280.8	74.70	1646.28	8766.54	6885.22	1597.80	74.70	1567.30	8766.54	6885.22	1534.62
16.4	14.4	11	0.70	0.50	0.79	35.40	34.65	282.7	63.87	1666.34	5585.03	4386.47	1615.82	63.87	1587.37	5585.03	4386.47	1552.64
16.5	14.5	11	0.70	0.50	0.79	35.40	34.63	284.7	64.25	1686.53	5614.31	4409.47	1633.93	64.25	1607.55	5614.31	4409.47	1570.75
16.6	14.6	11	0.70	0.50	0.79	35.40	34.61	286.7	64.63	1706.83	5643.53	4432.42	1652.14	64.63	1627.85	5643.53	4432.42	1588.95
16.7	14.7	12	0.70	0.50	0.86	37.70	43.75	288.6	70.54	1728.99	7176.21	5636.18	1671.83	70.54	1650.01	7176.21	5636.18	1608.65
16.8	14.8	12	0.70	0.50	0.86	37.70	43.72	290.6	70.95	1751.28	7213.17	5665.21	1691.62	70.95	1672.31	7213.17	5665.21	1628.44
16.9	14.9	12	0.70	0.50	0.86	37.70	43.69	292.6	71.36	1773.70	7250.05	5694.18	1711.52	71.36	1694.73	7250.05	5694.18	1648.34
17.0	15.0	12	0.70	0.50	0.86	37.70	43.66	294.5	71.77	1796.25	7286.85	5723.08	1731.53	71.77	1717.27	7286.85	5723.08	1668.34

1.2.4.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1338	1288

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.73	33.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.73	33.10	28.00	1.3	10.70	2.69	821.24	412.80	3.41	10.70	2.69	821.24	412.80	3.41
2.2	0.2	3	0.70	0.50	0.73	33.10	28.00	2.5	11.04	5.46	847.95	426.23	6.88	11.04	5.46	847.95	426.23	6.88
2.3	0.3	3	0.70	0.50	0.73	33.10	28.00	3.8	11.39	8.33	874.66	439.65	10.43	11.39	8.33	874.66	439.65	10.43
2.4	0.4	3	0.70	0.50	0.73	33.10	28.00	5.0	11.74	11.28	901.37	453.08	14.05	11.74	11.28	901.37	453.08	14.05
2.5	0.5	3	0.70	0.50	0.73	33.10	28.00	6.3	12.09	14.31	928.08	466.50	17.73	12.09	14.31	928.08	466.50	17.73
2.6	0.6	3	0.70	0.50	0.73	33.10	28.00	7.5	12.43	17.44	954.79	479.93	21.49	12.43	17.44	954.79	479.93	21.49
2.7	0.7	3	0.70	0.50	0.73	33.10	28.00	8.8	12.78	20.65	981.49	493.35	25.32	12.78	20.65	981.49	493.35	25.32
2.8	0.8	3	0.70	0.50	0.73	33.10	28.00	10.1	13.13	23.95	1008.20	506.78	29.21	13.13	23.95	1008.20	506.78	29.21
2.9	0.9	3	0.70	0.50	0.73	33.10	28.00	11.3	13.48	27.34	1034.91	520.20	33.18	13.48	27.34	1034.91	520.20	33.18
3.0	1.0	3	0.70	0.50	0.73	33.10	28.00	12.6	13.83	30.81	1061.62	533.63	37.22	13.83	30.81	1061.62	533.63	37.22
3.1	1.1	3	0.70	0.50	0.73	33.10	28.00	13.8	14.17	34.38	1088.33	547.05	41.32	14.17	34.38	1088.33	547.05	41.32
3.2	1.2	3	0.70	0.50	0.73	33.10	28.00	15.1	14.52	38.03	1115.04	560.48	45.50	14.52	38.03	1115.04	560.48	45.50
3.3	1.3	3	0.70	0.50	0.73	33.10	28.00	16.3	14.87	41.76	1141.75	573.90	49.75	14.87	41.76	1141.75	573.90	49.75
3.4	1.4	3	0.70	0.50	0.73	33.10	28.00	17.6	15.22	45.59	1168.45	587.33	54.06	15.22	45.59	1168.45	587.33	54.06
3.5	1.5	3	0.70	0.50	0.73	33.10	28.00	18.8	15.57	49.50	1195.16	600.75	58.45	15.57	49.50	1195.16	600.75	58.45
3.6	1.6	3	0.70	0.50	0.73	33.10	28.00	20.1	15.91	53.50	1221.87	614.18	62.91	15.91	53.50	1221.87	614.18	62.91
3.7	1.7	3	0.70	0.50	0.73	33.10	28.00	21.4	16.26	57.59	1248.58	627.60	67.43	16.26	57.59	1248.58	627.60	67.43
3.8	1.8	3	0.70	0.50	0.73	33.10	28.00	22.6	16.61	61.76	1275.29	641.03	72.03	16.61	61.76	1275.29	641.03	72.03
3.9	1.9	3	0.70	0.50	0.73	33.10	28.00	23.9	16.96	66.02	1302.00	654.45	76.69	16.96	66.02	1302.00	654.45	76.69
4.0	2.0	3	0.70	0.50	0.73	33.10	28.00	25.1	17.30	70.37	1328.70	667.88	81.43	17.30	70.37	1328.70	667.88	81.43
4.1	2.1	3	0.70	0.50	0.73	33.10	28.00	26.4	17.65	74.81	1355.41	681.30	86.24	17.65	74.81	1355.41	681.30	86.24
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	27.6	17.50	79.21	305.66	153.64	91.01	9.95	77.31	175.74	88.34	89.49
4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	28.9	17.50	83.60	307.49	154.56	95.79	10.12	79.85	178.78	89.87	92.78

Breve termine

Lungo termine

Palo

4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	30.2	17.50	88.00	309.32	155.48	100.56	10.30	82.44	181.82	91.39	96.11
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	31.4	17.50	92.40	311.16	156.40	105.34	10.47	85.07	184.86	92.92	99.47
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	32.7	17.50	96.80	312.99	157.33	110.11	10.64	87.75	187.90	94.45	102.87
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	33.9	17.50	101.20	314.82	158.25	114.89	10.81	90.46	190.94	95.98	106.30
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	35.2	17.50	105.59	316.66	159.17	119.66	10.99	93.22	193.98	97.50	109.77
4.9	2.9	5	0.70	0.50	0.71	32.53	26.23	36.4	19.75	110.56	1451.54	729.62	124.89	19.75	98.19	1451.54	729.62	114.99
5.0	3.0	5	0.70	0.50	0.71	32.53	26.23	37.7	20.09	115.61	1476.57	742.20	130.19	20.09	103.24	1476.57	742.20	120.29
5.1	3.1	5	0.70	0.50	0.71	32.53	26.23	39.0	20.43	120.74	1501.59	754.78	135.55	20.43	108.37	1501.59	754.78	125.66
5.2	3.2	5	0.70	0.50	0.71	32.53	26.23	40.2	20.77	125.97	1526.62	767.36	140.98	20.77	113.60	1526.62	767.36	131.09
5.3	3.3	5	0.70	0.50	0.71	32.53	26.23	41.5	21.11	131.27	1551.65	779.94	146.49	21.11	118.90	1551.65	779.94	136.59
5.4	3.4	5	0.70	0.50	0.71	32.53	26.23	42.7	21.45	136.66	1576.67	792.52	152.06	21.45	124.29	1576.67	792.52	142.16
5.5	3.5	5	0.70	0.50	0.71	32.53	26.23	44.0	21.80	142.14	1601.70	805.10	157.70	21.80	129.77	1601.70	805.10	147.80
5.6	3.6	5	0.70	0.50	0.71	32.53	26.23	45.2	22.14	147.71	1626.73	817.68	163.40	22.14	135.34	1626.73	817.68	153.51
5.7	3.7	5	0.70	0.50	0.71	32.53	26.23	46.5	22.48	153.35	1651.75	830.26	169.18	22.48	140.98	1651.75	830.26	159.28
5.8	3.8	5	0.70	0.50	0.71	32.53	26.23	47.8	22.82	159.09	1676.78	842.84	175.02	22.82	146.72	1676.78	842.84	165.13
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	49.0	21.70	164.54	427.84	215.06	180.64	13.08	150.01	231.05	116.14	169.01
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	50.3	21.70	170.00	429.67	215.98	186.26	13.26	153.34	234.09	117.67	172.94
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	51.5	21.70	175.45	431.51	216.90	191.88	13.43	156.71	237.13	119.19	176.89
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	52.8	21.70	180.90	433.34	217.82	197.50	13.60	160.13	240.17	120.72	180.88
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	54.0	21.70	186.36	435.17	218.74	203.12	13.77	163.59	243.21	122.25	184.91
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	55.3	21.70	191.81	437.00	219.66	208.74	13.94	167.10	246.25	123.78	188.97
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	56.5	21.70	197.27	438.84	220.58	214.36	14.12	170.65	249.29	125.30	193.07
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	57.8	21.70	202.72	440.67	221.50	219.98	14.29	174.24	252.32	126.83	197.20
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	59.1	21.70	208.17	442.50	222.43	225.60	14.46	177.87	255.36	128.36	201.36
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	60.3	21.70	213.63	444.34	223.35	231.22	14.63	181.55	258.40	129.89	205.56
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	61.6	21.70	219.08	446.17	224.27	236.84	14.81	185.27	261.44	131.42	209.79
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	62.8	21.70	224.53	448.00	225.19	242.46	14.98	189.04	264.48	132.94	214.06
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	64.1	21.70	229.99	449.84	226.11	248.08	15.15	192.84	267.52	134.47	218.36
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	65.3	21.70	235.44	451.67	227.03	253.70	15.32	196.69	270.56	136.00	222.70
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	66.6	21.70	240.90	453.50	227.95	259.32	15.49	200.59	273.60	137.53	227.07
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	67.9	21.70	246.35	455.33	228.88	264.94	15.67	204.53	276.64	139.05	231.48
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	69.1	21.70	251.80	457.17	229.80	270.56	15.84	208.51	279.68	140.58	235.92
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	70.4	21.70	257.26	459.00	230.72	276.18	16.01	212.53	282.72	142.11	240.40
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	71.6	21.70	262.71	460.83	231.64	281.80	16.18	216.60	285.76	143.64	244.91
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	72.9	21.70	268.16	462.67	232.56	287.42	16.35	220.71	288.80	145.16	249.45
7.9	5.9	7	0.70	0.50	0.79	35.40	35.92	74.1	32.46	276.32	2942.62	1479.12	295.20	32.46	228.87	2942.62	1479.12	257.23
8.0	6.0	7	0.70	0.50	0.79	35.40	35.92	75.4	32.84	284.58	2976.90	1496.35	303.06	32.84	237.12	2976.90	1496.35	265.09
8.1	6.1	7	0.70	0.50	0.79	35.40	35.92	76.7	33.22	292.93	3011.17	1513.58	311.00	33.22	245.47	3011.17	1513.58	273.03
8.2	6.2	7	0.70	0.50	0.79	35.40	35.92	77.9	33.60	301.37	3045.44	1530.80	319.01	33.60	253.91	3045.44	1530.80	281.04
8.3	6.3	7	0.70	0.50	0.79	35.40	35.92	79.2	33.97	309.91	3079.71	1548.03	327.09	33.97	262.45	3079.71	1548.03	289.13
8.4	6.4	7	0.70	0.50	0.79	35.40	35.92	80.4	34.35	318.54	3113.98	1565.26	335.26	34.35	271.08	3113.98	1565.26	297.29
8.5	6.5	7	0.70	0.50	0.79	35.40	35.90	81.7	34.73	327.27	3146.43	1581.57	343.50	34.73	279.81	3146.43	1581.57	305.53
8.6	6.6	7	0.70	0.50	0.79	35.40	35.88	82.9	35.11	336.09	3178.82	1597.85	351.81	35.11	288.63	3178.82	1597.85	313.85
8.7	6.7	7	0.70	0.50	0.79	35.40	35.86	84.2	35.49	345.01	3211.16	1614.11	360.20	35.49	297.55	3211.16	1614.11	322.24
8.8	6.8	8	0.58	0.50	0.40	19.00	3.56	85.5	23.20	350.84	526.91	264.86	366.13	18.26	302.14	321.36	161.53	327.17
8.9	6.9	8	0.58	0.50	0.40	19.00	3.55	86.7	23.20	356.67	528.75	265.78	372.05	18.43	306.78	324.11	162.91	332.13
9.0	7.0	8	0.58	0.50	0.40	19.00	3.55	88.0	23.20	362.50	530.58	266.70	377.97	18.61	311.45	326.85	164.29	337.13

9.1	7.1	8	0.58	0.50	0.40	19.00	3.55	89.2	23.20	368.33	532.41	267.62	383.89	18.78	316.17	329.58	165.67	342.16
9.2	7.2	8	0.58	0.50	0.40	19.00	3.54	90.5	23.20	374.17	534.25	268.54	389.81	18.95	320.93	332.31	167.04	347.22
9.3	7.3	8	0.58	0.50	0.40	19.00	3.54	91.7	23.20	380.00	536.08	269.46	395.73	19.12	325.74	335.03	168.40	352.33
9.4	7.4	8	0.58	0.50	0.40	19.00	3.54	93.0	23.20	385.83	537.91	270.38	401.65	19.29	330.59	337.74	169.77	357.46
9.5	7.5	8	0.58	0.50	0.40	19.00	3.53	94.2	23.20	391.66	539.75	271.31	407.57	19.47	335.48	340.45	171.13	362.63
9.6	7.6	8	0.58	0.50	0.40	19.00	3.53	95.5	23.20	397.49	541.58	272.23	413.50	19.64	340.42	343.15	172.49	367.84
9.7	7.7	8	0.58	0.50	0.40	19.00	3.53	96.8	23.20	403.32	543.41	273.15	419.42	19.81	345.40	345.84	173.84	373.08
9.8	7.8	8	0.58	0.50	0.40	19.00	3.52	98.0	23.20	409.15	545.24	274.07	425.34	19.98	350.42	348.53	175.19	378.35
9.9	7.9	8	0.58	0.50	0.40	19.00	3.52	99.3	23.20	414.98	547.08	274.99	431.26	20.15	355.48	351.21	176.54	383.66
10.0	8.0	8	0.58	0.50	0.40	19.00	3.52	100.5	23.20	420.81	548.91	275.91	437.18	20.33	360.59	353.88	177.88	389.00
10.1	8.1	8	0.58	0.50	0.40	19.00	3.51	101.8	23.20	426.64	550.74	276.83	443.10	20.50	365.74	356.55	179.22	394.38
10.2	8.2	8	0.58	0.50	0.40	19.00	3.51	103.0	23.20	432.47	552.58	277.75	449.02	20.67	370.94	359.21	180.56	399.80
10.3	8.3	8	0.58	0.50	0.40	19.00	3.51	104.3	23.20	438.30	554.41	278.68	454.94	20.84	376.18	361.86	181.89	405.24
10.4	8.4	8	0.58	0.50	0.40	19.00	3.50	105.6	23.20	444.13	556.24	279.60	460.87	21.02	381.46	364.50	183.22	410.72
10.5	8.5	8	0.58	0.50	0.40	19.00	3.50	106.8	23.20	449.97	558.08	280.52	466.79	21.19	386.78	367.14	184.55	416.24
10.6	8.6	9	0.70	0.50	0.73	33.10	27.59	108.1	38.59	459.66	2920.35	1467.93	475.80	38.59	396.48	2920.35	1467.93	425.26
10.7	8.7	9	0.70	0.50	0.73	33.10	27.57	109.3	38.94	469.45	2944.57	1480.10	484.89	38.94	406.27	2944.57	1480.10	434.34
10.8	8.8	9	0.70	0.50	0.73	33.10	27.55	110.6	39.28	479.32	2968.74	1492.25	494.04	39.28	416.14	2968.74	1492.25	443.50
10.9	8.9	9	0.70	0.50	0.73	33.10	27.53	111.8	39.63	489.28	2992.86	1504.37	503.27	39.63	426.10	2992.86	1504.37	452.72
11.0	9.0	9	0.70	0.50	0.73	33.10	27.51	113.1	39.98	499.33	3016.92	1516.47	512.56	39.98	436.15	3016.92	1516.47	462.02
11.1	9.1	9	0.70	0.50	0.73	33.10	27.49	114.4	40.33	509.47	3040.94	1528.54	521.93	40.33	446.28	3040.94	1528.54	471.38
11.2	9.2	9	0.70	0.50	0.73	33.10	27.47	115.6	40.67	519.69	3064.90	1540.59	531.36	40.67	456.51	3064.90	1540.59	480.82
11.3	9.3	9	0.70	0.50	0.73	33.10	27.45	116.9	41.02	530.00	3088.81	1552.60	540.87	41.02	466.82	3088.81	1552.60	490.32
11.4	9.4	9	0.70	0.50	0.73	33.10	27.43	118.1	41.37	540.40	3112.66	1564.59	550.44	41.37	477.21	3112.66	1564.59	499.90
11.5	9.5	9	0.70	0.50	0.73	33.10	27.41	119.4	41.72	550.88	3136.46	1576.56	560.09	41.72	487.70	3136.46	1576.56	509.54
11.6	9.6	9	0.70	0.50	0.73	33.10	27.39	120.6	42.07	561.45	3160.21	1588.50	569.80	42.07	498.27	3160.21	1588.50	519.25
11.7	9.7	9	0.70	0.50	0.73	33.10	27.37	121.9	42.41	572.11	3183.90	1600.40	579.58	42.41	508.93	3183.90	1600.40	529.04
11.8	9.8	9	0.70	0.50	0.73	33.10	27.35	123.2	42.76	582.86	3207.54	1612.29	589.44	42.76	519.68	3207.54	1612.29	538.89
11.9	9.9	10	0.70	0.50	0.93	40.00	55.34	124.4	55.13	596.72	6543.64	3289.19	601.78	55.13	533.53	6543.64	3289.19	551.23
12.0	10.0	10	0.70	0.50	0.93	40.00	55.31	125.7	55.57	610.68	6591.83	3313.41	614.21	55.57	547.50	6591.83	3313.41	563.66
12.1	10.1	10	0.70	0.50	0.93	40.00	55.27	126.9	56.02	624.76	6639.91	3337.58	626.73	56.02	561.58	6639.91	3337.58	576.18
12.2	10.2	10	0.70	0.50	0.93	40.00	55.23	128.2	56.46	638.95	6687.89	3361.70	639.34	56.46	575.77	6687.89	3361.70	588.79
12.3	10.3	10	0.70	0.50	0.93	40.00	55.19	129.4	56.91	653.25	6735.76	3385.76	652.04	56.91	590.07	6735.76	3385.76	601.49
12.4	10.4	10	0.70	0.50	0.93	40.00	55.15	130.7	57.35	667.67	6783.52	3409.77	664.83	57.35	604.49	6783.52	3409.77	614.28
12.5	10.5	10	0.70	0.50	0.93	40.00	55.11	131.9	57.80	682.20	6831.17	3433.72	677.70	57.80	619.01	6831.17	3433.72	627.16
12.6	10.6	10	0.70	0.50	0.93	40.00	55.07	133.2	58.24	696.83	6878.71	3457.62	690.67	58.24	633.65	6878.71	3457.62	640.12
12.7	10.7	10	0.70	0.50	0.93	40.00	55.03	134.5	58.69	711.58	6926.14	3481.46	703.73	58.69	648.40	6926.14	3481.46	653.18
12.8	10.8	10	0.70	0.50	0.93	40.00	54.99	135.7	59.13	726.44	6973.46	3505.24	716.87	59.13	663.26	6973.46	3505.24	666.33
12.9	10.9	10	0.70	0.50	0.93	40.00	54.95	137.0	59.58	741.42	7020.66	3528.97	730.11	59.58	678.24	7020.66	3528.97	679.56
13.0	11.0	10	0.70	0.50	0.93	40.00	54.90	138.2	60.02	756.50	7067.75	3552.64	743.43	60.02	693.32	7067.75	3552.64	692.89
13.1	11.1	10	0.70	0.50	0.93	40.00	54.86	139.5	60.47	771.70	7114.73	3576.25	756.85	60.47	708.52	7114.73	3576.25	706.30
13.2	11.2	10	0.70	0.50	0.93	40.00	54.82	140.7	60.91	787.01	7161.59	3599.81	770.35	60.91	723.83	7161.59	3599.81	719.80
13.3	11.3	10	0.70	0.50	0.93	40.00	54.78	142.0	61.36	802.43	7208.33	3623.30	783.94	61.36	739.25	7208.33	3623.30	733.40
13.4	11.4	10	0.70	0.50	0.93	40.00	54.74	143.3	61.80	817.96	7254.96	3646.74	797.62	61.80	754.78	7254.96	3646.74	747.08
13.5	11.5	10	0.70	0.50	0.93	40.00	54.69	144.5	62.25	833.60	7301.47	3670.12	811.40	62.25	770.42	7301.47	3670.12	760.85
13.6	11.6	10	0.70	0.50	0.93	40.00	54.65	145.8	62.69	849.36	7347.86	3693.44	825.26	62.69	786.18	7347.86	3693.44	774.71
13.7	11.7	10	0.70	0.50	0.93	40.00	54.61	147.0	63.14	865.23	7394.13	3716.70	839.21	63.14	802.05	7394.13	3716.70	788.66

13.8	11.8	10	0.70	0.50	0.93	40.00	54.56	148.3	63.58	881.21	7440.28	3739.89	853.25	63.58	818.02	7440.28	3739.89	802.70
13.9	11.9	10	0.70	0.50	0.93	40.00	54.52	149.5	64.02	897.30	7486.31	3763.03	867.38	64.02	834.12	7486.31	3763.03	816.83
14.0	12.0	10	0.70	0.50	0.93	40.00	54.47	150.8	64.47	913.50	7532.21	3786.10	881.60	64.47	850.32	7532.21	3786.10	831.05
14.1	12.1	10	0.70	0.50	0.93	40.00	54.43	152.1	64.91	929.82	7577.99	3809.11	895.91	64.91	866.63	7577.99	3809.11	845.36
14.2	12.2	10	0.70	0.50	0.93	40.00	54.39	153.3	65.36	946.24	7623.65	3832.06	910.30	65.36	883.06	7623.65	3832.06	859.76
14.3	12.3	10	0.70	0.50	0.93	40.00	54.34	154.6	65.80	962.78	7669.18	3854.95	924.79	65.80	899.60	7669.18	3854.95	874.24
14.4	12.4	10	0.70	0.50	0.93	40.00	54.30	155.8	66.25	979.43	7714.58	3877.77	939.37	66.25	916.25	7714.58	3877.77	888.82
14.5	12.5	10	0.70	0.50	0.93	40.00	54.25	157.1	66.69	996.19	7759.86	3900.53	954.03	66.69	933.01	7759.86	3900.53	903.49
14.6	12.6	10	0.70	0.50	0.93	40.00	54.20	158.3	67.14	1013.07	7805.01	3923.22	968.79	67.14	949.88	7805.01	3923.22	918.24
14.7	12.7	10	0.70	0.50	0.93	40.00	54.16	159.6	67.58	1030.05	7850.02	3945.85	983.63	67.58	966.87	7850.02	3945.85	933.09
14.8	12.8	10	0.70	0.50	0.93	40.00	54.11	160.8	68.03	1047.15	7894.91	3968.42	998.57	68.03	983.97	7894.91	3968.42	948.02
14.9	12.9	10	0.70	0.50	0.93	40.00	54.08	162.1	68.47	1064.36	7942.36	3992.26	1013.59	68.47	1001.18	7942.36	3992.26	963.05
15.0	13.0	10	0.70	0.50	0.93	40.00	54.05	163.4	68.92	1081.68	7989.75	4016.09	1028.71	68.92	1018.50	7989.75	4016.09	978.16
15.1	13.1	10	0.70	0.50	0.93	40.00	54.03	164.6	69.36	1099.11	8037.09	4039.88	1043.91	69.36	1035.93	8037.09	4039.88	993.36
15.2	13.2	10	0.70	0.50	0.93	40.00	54.00	165.9	69.81	1116.66	8084.38	4063.65	1059.20	69.81	1053.47	8084.38	4063.65	1008.66
15.3	13.3	10	0.70	0.50	0.93	40.00	53.97	167.1	70.25	1134.31	8131.61	4087.40	1074.58	70.25	1071.13	8131.61	4087.40	1024.04
15.4	13.4	10	0.70	0.50	0.93	40.00	53.94	168.4	70.70	1152.08	8178.80	4111.11	1090.05	70.70	1088.90	8178.80	4111.11	1039.51
15.5	13.5	10	0.70	0.50	0.93	40.00	53.91	169.6	71.14	1169.96	8225.93	4134.80	1105.61	71.14	1106.78	8225.93	4134.80	1055.07
15.6	13.6	10	0.70	0.50	0.93	40.00	53.88	170.9	71.59	1187.95	8273.01	4158.47	1121.26	71.59	1124.77	8273.01	4158.47	1070.72
15.7	13.7	10	0.70	0.50	0.93	40.00	53.86	172.2	72.03	1206.06	8320.04	4182.11	1137.00	72.03	1142.87	8320.04	4182.11	1086.46
15.8	13.8	10	0.70	0.50	0.93	40.00	53.83	173.4	72.48	1224.27	8367.02	4205.72	1152.83	72.48	1161.09	8367.02	4205.72	1102.29
15.9	13.9	10	0.70	0.50	0.93	40.00	53.80	174.7	72.92	1242.60	8413.94	4229.31	1168.75	72.92	1179.42	8413.94	4229.31	1118.20
16.0	14.0	10	0.70	0.50	0.93	40.00	53.77	175.9	73.37	1261.04	8460.82	4252.87	1184.76	73.37	1197.85	8460.82	4252.87	1134.21
16.1	14.1	10	0.70	0.50	0.93	40.00	53.74	177.2	73.81	1279.59	8507.64	4276.41	1200.86	73.81	1216.40	8507.64	4276.41	1150.31
16.2	14.2	10	0.70	0.50	0.93	40.00	53.71	178.4	74.26	1298.25	8554.41	4299.92	1217.04	74.26	1235.07	8554.41	4299.92	1166.50
16.3	14.3	10	0.70	0.50	0.93	40.00	53.69	179.7	74.70	1317.02	8601.13	4323.40	1233.32	74.70	1253.84	8601.13	4323.40	1182.77
16.4	14.4	11	0.70	0.50	0.79	35.40	33.99	181.0	63.87	1333.08	5478.10	2753.59	1247.42	63.87	1269.89	5478.10	2753.59	1196.87
16.5	14.5	11	0.70	0.50	0.79	35.40	33.97	182.2	64.25	1349.22	5507.73	2768.49	1261.59	64.25	1286.04	5507.73	2768.49	1211.04
16.6	14.6	11	0.70	0.50	0.79	35.40	33.96	183.5	64.63	1365.46	5537.33	2783.37	1275.84	64.63	1302.28	5537.33	2783.37	1225.29
16.7	14.7	12	0.70	0.50	0.86	37.70	42.94	184.7	70.54	1383.19	7043.12	3540.26	1291.28	70.54	1320.01	7043.12	3540.26	1240.74
16.8	14.8	12	0.70	0.50	0.86	37.70	42.92	186.0	70.95	1401.03	7080.42	3559.01	1306.80	70.95	1337.84	7080.42	3559.01	1256.26
16.9	14.9	12	0.70	0.50	0.86	37.70	42.89	187.2	71.36	1418.96	7117.68	3577.74	1322.41	71.36	1355.78	7117.68	3577.74	1271.86
17.0	15.0	12	0.70	0.50	0.86	37.70	42.87	188.5	71.77	1437.00	7154.90	3596.45	1338.10	71.77	1373.82	7154.90	3596.45	1287.55

1.2.4.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.5**	**19.35**			0.70	0.50	0.00
2	**1.5**	**2.0**	**18.33**	**22**	**16**	0.70	0.50	0.40
3	**2.0**	**4.1**	**19.35**			0.70	0.50	0.00
4	**4.1**	**4.8**	**18.33**	**22**	**25**	0.70	0.50	0.40
5	**4.8**	**5.8**	**19.35**			0.70	0.50	0.00
6	**5.8**	**7.8**	**18.33**	**22**	**35**	0.62	0.50	0.40
7	**7.8**	**8.7**	**19.35**			0.70	0.50	0.00
8	**8.7**	**10.5**	**18.33**	**22**	**40**	0.58	0.50	0.40
9	**10.5**	**11.8**	**19.35**			0.70	0.50	0.00
10	**11.8**	**16.3**	**19.35**	**43**		0.70	0.50	0.93
11	**16.3**	**16.6**	**19.35**			0.70	0.50	0.00
12	**16.6**	**18.7**	**19.35**	**41**		0.70	0.50	0.86
13	**18.7**	**18.9**	**19.35**			0.70	0.50	0.00
14	**18.9**	**20.4**	**19.35**	**41**		0.70	0.50	0.86
15	**20.4**	**21.0**	**19.35**			0.70	0.50	0.00
16	**21.0**	**21.3**	**19.35**	**41**		0.70	0.50	0.86
17	**21.3**	**24.0**	**19.35**			0.70	0.50	0.00

1.2.4.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1685	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	2.83
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	5.65
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	8.48
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	14.14
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	16.96
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	19.79
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	25.45
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	28.27
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	31.10
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	33.93
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	36.76
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	39.58
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	42.41
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	45.24
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	48.07
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	50.89
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	53.72
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	56.55
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	59.38
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	62.2	17.50	6.60	305.66	345.69	67.48

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	65.0	17.50	13.19	307.49	347.76	75.59
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	67.9	17.50	19.79	309.32	349.84	83.69
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	70.7	17.50	26.39	311.16	351.91	91.80
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	73.5	17.50	32.99	312.99	353.98	99.90
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	76.3	17.50	39.58	314.82	356.06	108.01
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	79.2	17.50	46.18	316.66	358.13	116.11
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	82.0	0.00	46.18	0.00	0.00	118.94
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	84.8	0.00	46.18	0.00	0.00	121.77
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	87.7	0.00	46.18	0.00	0.00	124.60
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	90.5	0.00	46.18	0.00	0.00	127.42
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	93.3	0.00	46.18	0.00	0.00	130.25
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	96.1	0.00	46.18	0.00	0.00	133.08
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	99.0	0.00	46.18	0.00	0.00	135.91
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	101.8	0.00	46.18	0.00	0.00	138.73
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	104.6	0.00	46.18	0.00	0.00	141.56
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	107.4	0.00	46.18	0.00	0.00	144.39
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	110.3	21.70	54.36	427.84	483.87	153.76
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	113.1	21.70	62.54	429.67	485.95	163.13
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	115.9	21.70	70.72	431.51	488.02	172.50
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	118.8	21.70	78.90	433.34	490.09	181.88
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	121.6	21.70	87.08	435.17	492.17	191.25
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	124.4	21.70	95.27	437.00	494.24	200.62
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	127.2	21.70	103.45	438.84	496.31	209.99
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	130.1	21.70	111.63	440.67	498.39	219.36
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	132.9	21.70	119.81	442.50	500.46	228.74
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	135.7	21.70	127.99	444.34	502.53	238.11
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	138.5	21.70	136.17	446.17	504.61	247.48
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	141.4	21.70	144.35	448.00	506.68	256.85
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	144.2	21.70	152.53	449.84	508.75	266.22
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	147.0	21.70	160.71	451.67	510.82	275.60
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	149.9	21.70	168.89	453.50	512.90	284.97
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	152.7	21.70	177.07	455.33	514.97	294.34
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	155.5	21.70	185.25	457.17	517.04	303.71
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	158.3	21.70	193.43	459.00	519.12	313.08
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	161.2	21.70	201.61	460.83	521.19	322.46
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	164.0	21.70	209.80	462.67	523.26	331.83
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	166.8	0.00	209.80	0.00	0.00	334.66
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	169.6	0.00	209.80	0.00	0.00	337.48
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	172.5	0.00	209.80	0.00	0.00	340.31
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	175.3	0.00	209.80	0.00	0.00	343.14
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	178.1	0.00	209.80	0.00	0.00	345.96
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	181.0	0.00	209.80	0.00	0.00	348.79
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	183.8	0.00	209.80	0.00	0.00	351.62
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	186.6	0.00	209.80	0.00	0.00	354.45
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	189.4	0.00	209.80	0.00	0.00	357.27
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	192.3	23.20	218.54	526.91	595.93	367.10
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	195.1	23.20	227.29	528.75	598.00	376.92

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	197.9	23.20	236.03	530.58	600.07	386.75
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	200.7	23.20	244.78	532.41	602.14	396.57
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	203.6	23.20	253.53	534.25	604.22	406.40
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	206.4	23.20	262.27	536.08	606.29	416.22
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	209.2	23.20	271.02	537.91	608.36	426.05
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	212.1	23.20	279.77	539.75	610.44	435.87
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	214.9	23.20	288.51	541.58	612.51	445.69
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	217.7	23.20	297.26	543.41	614.58	455.52
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	220.5	23.20	306.00	545.24	616.66	465.34
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	223.4	23.20	314.75	547.08	618.73	475.17
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	226.2	23.20	323.50	548.91	620.80	484.99
10.1	8.1	8	0.58	0.50	0.40	19.00	3.57	229.0	23.20	332.24	550.74	622.88	494.82
10.2	8.2	8	0.58	0.50	0.40	19.00	3.57	231.8	23.20	340.99	552.58	624.95	504.64
10.3	8.3	8	0.58	0.50	0.40	19.00	3.57	234.7	23.20	349.73	554.41	627.02	514.46
10.4	8.4	8	0.58	0.50	0.40	19.00	3.57	237.5	23.20	358.48	556.24	629.09	524.29
10.5	8.5	8	0.58	0.50	0.40	19.00	3.57	240.3	23.20	367.23	558.08	631.17	534.11
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	243.2	0.00	367.23	0.00	0.00	536.94
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	246.0	0.00	367.23	0.00	0.00	539.77
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	248.8	0.00	367.23	0.00	0.00	542.60
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	251.6	0.00	367.23	0.00	0.00	545.42
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	254.5	0.00	367.23	0.00	0.00	548.25
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	257.3	0.00	367.23	0.00	0.00	551.08
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	260.1	0.00	367.23	0.00	0.00	553.91
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	263.0	0.00	367.23	0.00	0.00	556.73
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	265.8	0.00	367.23	0.00	0.00	559.56
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	268.6	0.00	367.23	0.00	0.00	562.39
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	271.4	0.00	367.23	0.00	0.00	565.22
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	274.3	0.00	367.23	0.00	0.00	568.04
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	277.1	0.00	367.23	0.00	0.00	570.87
11.9	9.9	10	0.70	0.50	0.93	40.00	56.47	279.9	55.13	388.01	6677.32	7551.88	590.32
12.0	10.0	10	0.70	0.50	0.93	40.00	56.45	282.7	55.57	408.96	6728.80	7610.09	609.91
12.1	10.1	10	0.70	0.50	0.93	40.00	56.43	285.6	56.02	430.08	6780.23	7668.25	629.63
12.2	10.2	10	0.70	0.50	0.93	40.00	56.41	288.4	56.46	451.36	6831.60	7726.36	649.49
12.3	10.3	10	0.70	0.50	0.93	40.00	56.39	291.2	56.91	472.82	6882.92	7784.40	669.48
12.4	10.4	10	0.70	0.50	0.93	40.00	56.37	294.1	57.35	494.44	6934.19	7842.38	689.61
12.5	10.5	10	0.70	0.50	0.93	40.00	56.35	296.9	57.80	516.23	6985.40	7900.31	709.86
12.6	10.6	10	0.70	0.50	0.93	40.00	56.33	299.7	58.24	538.19	7036.57	7958.17	730.26
12.7	10.7	10	0.70	0.50	0.93	40.00	56.31	302.5	58.69	560.31	7087.68	8015.97	750.78
12.8	10.8	10	0.70	0.50	0.93	40.00	56.29	305.4	59.13	582.60	7138.73	8073.72	771.44
12.9	10.9	10	0.70	0.50	0.93	40.00	56.27	308.2	59.58	605.06	7189.73	8131.40	792.24
13.0	11.0	10	0.70	0.50	0.93	40.00	56.25	311.0	60.02	627.69	7240.68	8189.02	813.17
13.1	11.1	10	0.70	0.50	0.93	40.00	56.23	313.8	60.47	650.48	7291.57	8246.58	834.23
13.2	11.2	10	0.70	0.50	0.93	40.00	56.20	316.7	60.91	673.45	7342.41	8304.07	855.43
13.3	11.3	10	0.70	0.50	0.93	40.00	56.18	319.5	61.36	696.58	7393.19	8361.50	876.76
13.4	11.4	10	0.70	0.50	0.93	40.00	56.16	322.3	61.80	719.88	7443.92	8418.87	898.23
13.5	11.5	10	0.70	0.50	0.93	40.00	56.14	325.2	62.25	743.34	7494.59	8476.18	919.83
13.6	11.6	10	0.70	0.50	0.93	40.00	56.12	328.0	62.69	766.98	7545.20	8533.42	941.56

13.7	11.7	10	0.70	0.50	0.93	40.00	56.10	330.8	63.14	790.78	7595.76	8590.60	963.43
13.8	11.8	10	0.70	0.50	0.93	40.00	56.07	333.6	63.58	814.75	7646.26	8647.71	985.43
13.9	11.9	10	0.70	0.50	0.93	40.00	56.05	336.5	64.02	838.88	7696.70	8704.76	1007.57
14.0	12.0	10	0.70	0.50	0.93	40.00	56.03	339.3	64.47	863.19	7747.08	8761.74	1029.84
14.1	12.1	10	0.70	0.50	0.93	40.00	56.01	342.1	64.91	887.66	7797.41	8818.66	1052.25
14.2	12.2	10	0.70	0.50	0.93	40.00	55.98	344.9	65.36	912.30	7847.67	8875.51	1074.79
14.3	12.3	10	0.70	0.50	0.93	40.00	55.96	347.8	65.80	937.11	7897.88	8932.29	1097.46
14.4	12.4	10	0.70	0.50	0.93	40.00	55.94	350.6	66.25	962.08	7948.03	8989.01	1120.27
14.5	12.5	10	0.70	0.50	0.93	40.00	55.92	353.4	66.69	987.23	7998.12	9045.66	1143.21
14.6	12.6	10	0.70	0.50	0.93	40.00	55.89	356.3	67.14	1012.54	8048.15	9102.24	1166.29
14.7	12.7	10	0.70	0.50	0.93	40.00	55.87	359.1	67.58	1038.01	8098.12	9158.75	1189.50
14.8	12.8	10	0.70	0.50	0.93	40.00	55.85	361.9	68.03	1063.66	8148.02	9215.20	1212.84
14.9	12.9	10	0.70	0.50	0.93	40.00	55.82	364.7	68.47	1089.47	8197.87	9271.57	1236.32
15.0	13.0	10	0.70	0.50	0.93	40.00	55.80	367.6	68.92	1115.45	8247.65	9327.88	1259.93
15.1	13.1	10	0.70	0.50	0.93	40.00	55.78	370.4	69.36	1141.60	8297.38	9384.11	1283.68
15.2	13.2	10	0.70	0.50	0.93	40.00	55.75	373.2	69.81	1167.92	8347.04	9440.28	1307.56
15.3	13.3	10	0.70	0.50	0.93	40.00	55.73	376.0	70.25	1194.40	8396.64	9496.37	1331.57
15.4	13.4	10	0.70	0.50	0.93	40.00	55.70	378.9	70.70	1221.06	8446.17	9552.40	1355.72
15.5	13.5	10	0.70	0.50	0.93	40.00	55.68	381.7	71.14	1247.88	8495.64	9608.35	1380.00
15.6	13.6	10	0.70	0.50	0.93	40.00	55.66	384.5	71.59	1274.86	8545.05	9664.23	1404.42
15.7	13.7	10	0.70	0.50	0.93	40.00	55.63	387.4	72.03	1302.02	8594.40	9720.03	1428.97
15.8	13.8	10	0.70	0.50	0.93	40.00	55.61	390.2	72.48	1329.34	8643.68	9775.77	1453.66
15.9	13.9	10	0.70	0.50	0.93	40.00	55.58	393.0	72.92	1356.83	8692.89	9831.43	1478.48
16.0	14.0	10	0.70	0.50	0.93	40.00	55.56	395.8	73.37	1384.49	8742.04	9887.02	1503.43
16.1	14.1	10	0.70	0.50	0.93	40.00	55.53	398.7	73.81	1412.32	8791.13	9942.53	1528.52
16.2	14.2	10	0.70	0.50	0.93	40.00	55.51	401.5	74.26	1440.31	8840.15	9997.97	1553.74
16.3	14.3	10	0.70	0.50	0.93	40.00	55.48	404.3	74.70	1468.47	8889.10	10053.34	1579.10
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1468.47	0.00	0.00	1581.93
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1468.47	0.00	0.00	1584.75
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1468.47	0.00	0.00	1587.58
16.7	14.7	12	0.70	0.50	0.86	37.70	44.42	415.6	70.54	1495.07	7285.35	8239.54	1611.68
16.8	14.8	12	0.70	0.50	0.86	37.70	44.39	418.5	70.95	1521.81	7324.22	8283.49	1635.91
16.9	14.9	12	0.70	0.50	0.86	37.70	44.37	421.3	71.36	1548.72	7363.02	8327.38	1660.26
17.0	15.0	12	0.70	0.50	0.86	37.70	44.35	424.1	71.77	1575.78	7401.77	8371.21	1684.74

1.2.4.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1345	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	1.96
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	3.93
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	5.89
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	7.85
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	9.82
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	11.78
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	13.74
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	15.71
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	17.67
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	19.63
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	21.60
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	23.56
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	25.53
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	27.49
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	29.45
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	31.42
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	33.38
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	35.34
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	37.31
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	39.27
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	41.23
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	43.2	17.50	5.50	305.66	240.06	47.60

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	45.2	17.50	11.00	307.49	241.50	53.96
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	47.1	17.50	16.49	309.32	242.94	60.32
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	49.1	17.50	21.99	311.16	244.38	66.68
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	51.1	17.50	27.49	312.99	245.82	73.04
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	53.0	17.50	32.99	314.82	247.26	79.40
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	55.0	17.50	38.48	316.66	248.70	85.77
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	56.9	0.00	38.48	0.00	0.00	87.73
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	58.9	0.00	38.48	0.00	0.00	89.69
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	60.9	0.00	38.48	0.00	0.00	91.66
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	62.8	0.00	38.48	0.00	0.00	93.62
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	64.8	0.00	38.48	0.00	0.00	95.58
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	66.8	0.00	38.48	0.00	0.00	97.55
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	68.7	0.00	38.48	0.00	0.00	99.51
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	70.7	0.00	38.48	0.00	0.00	101.47
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	72.6	0.00	38.48	0.00	0.00	103.44
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	74.6	0.00	38.48	0.00	0.00	105.40
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	76.6	21.70	45.30	427.84	336.02	112.82
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	78.5	21.70	52.12	429.67	337.46	120.24
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	80.5	21.70	58.94	431.51	338.90	127.65
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	82.5	21.70	65.75	433.34	340.34	135.07
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	84.4	21.70	72.57	435.17	341.78	142.49
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	86.4	21.70	79.39	437.00	343.22	149.90
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	88.4	21.70	86.21	438.84	344.66	157.32
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	90.3	21.70	93.02	440.67	346.10	164.74
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	92.3	21.70	99.84	442.50	347.54	172.16
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	94.2	21.70	106.66	444.34	348.98	179.57
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	96.2	21.70	113.47	446.17	350.42	186.99
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	98.2	21.70	120.29	448.00	351.86	194.41
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	100.1	21.70	127.11	449.84	353.30	201.83
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	102.1	21.70	133.93	451.67	354.74	209.24
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	104.1	21.70	140.74	453.50	356.18	216.66
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	106.0	21.70	147.56	455.33	357.62	224.08
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	108.0	21.70	154.38	457.17	359.06	231.49
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	110.0	21.70	161.20	459.00	360.50	238.91
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	111.9	21.70	168.01	460.83	361.94	246.33
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	113.9	21.70	174.83	462.67	363.38	253.75
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	115.8	0.00	174.83	0.00	0.00	255.71
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	117.8	0.00	174.83	0.00	0.00	257.67
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	119.8	0.00	174.83	0.00	0.00	259.64
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	121.7	0.00	174.83	0.00	0.00	261.60
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	123.7	0.00	174.83	0.00	0.00	263.56
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	125.7	0.00	174.83	0.00	0.00	265.53
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	127.6	0.00	174.83	0.00	0.00	267.49
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	129.6	0.00	174.83	0.00	0.00	269.45
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	131.6	0.00	174.83	0.00	0.00	271.42
8.8	6.8	8	0.58	0.50	0.40	19.00	3.57	133.5	23.20	182.12	526.91	413.84	279.21
8.9	6.9	8	0.58	0.50	0.40	19.00	3.57	135.5	23.20	189.41	528.75	415.28	287.01

9.0	7.0	8	0.58	0.50	0.40	19.00	3.57	137.4	23.20	196.70	530.58	416.72	294.80
9.1	7.1	8	0.58	0.50	0.40	19.00	3.57	139.4	23.20	203.98	532.41	418.16	302.60
9.2	7.2	8	0.58	0.50	0.40	19.00	3.57	141.4	23.20	211.27	534.25	419.60	310.39
9.3	7.3	8	0.58	0.50	0.40	19.00	3.57	143.3	23.20	218.56	536.08	421.04	318.18
9.4	7.4	8	0.58	0.50	0.40	19.00	3.57	145.3	23.20	225.85	537.91	422.48	325.98
9.5	7.5	8	0.58	0.50	0.40	19.00	3.57	147.3	23.20	233.14	539.75	423.91	333.77
9.6	7.6	8	0.58	0.50	0.40	19.00	3.57	149.2	23.20	240.43	541.58	425.35	341.57
9.7	7.7	8	0.58	0.50	0.40	19.00	3.57	151.2	23.20	247.71	543.41	426.79	349.36
9.8	7.8	8	0.58	0.50	0.40	19.00	3.57	153.2	23.20	255.00	545.24	428.23	357.16
9.9	7.9	8	0.58	0.50	0.40	19.00	3.57	155.1	23.20	262.29	547.08	429.67	364.95
10.0	8.0	8	0.58	0.50	0.40	19.00	3.57	157.1	23.20	269.58	548.91	431.11	372.74
10.1	8.1	8	0.58	0.50	0.40	19.00	3.56	159.0	23.20	276.87	550.74	432.55	380.54
10.2	8.2	8	0.58	0.50	0.40	19.00	3.56	161.0	23.20	284.16	552.58	433.99	388.33
10.3	8.3	8	0.58	0.50	0.40	19.00	3.56	163.0	23.20	291.45	554.41	435.43	396.13
10.4	8.4	8	0.58	0.50	0.40	19.00	3.56	164.9	23.20	298.73	556.24	436.87	403.92
10.5	8.5	8	0.58	0.50	0.40	19.00	3.56	166.9	23.20	306.02	558.08	438.31	411.72
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	168.9	0.00	306.02	0.00	0.00	413.68
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	170.8	0.00	306.02	0.00	0.00	415.64
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	172.8	0.00	306.02	0.00	0.00	417.61
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	174.8	0.00	306.02	0.00	0.00	419.57
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	176.7	0.00	306.02	0.00	0.00	421.53
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	178.7	0.00	306.02	0.00	0.00	423.50
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	180.6	0.00	306.02	0.00	0.00	425.46
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	182.6	0.00	306.02	0.00	0.00	427.42
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	184.6	0.00	306.02	0.00	0.00	429.39
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	186.5	0.00	306.02	0.00	0.00	431.35
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	188.5	0.00	306.02	0.00	0.00	433.31
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	190.5	0.00	306.02	0.00	0.00	435.28
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	192.4	0.00	306.02	0.00	0.00	437.24
11.9	9.9	10	0.70	0.50	0.93	40.00	56.06	194.4	55.13	323.34	6627.77	5205.44	453.06
12.0	10.0	10	0.70	0.50	0.93	40.00	56.03	196.3	55.57	340.80	6678.05	5244.93	468.99
12.1	10.1	10	0.70	0.50	0.93	40.00	56.00	198.3	56.02	358.40	6728.27	5284.37	485.03
12.2	10.2	10	0.70	0.50	0.93	40.00	55.97	200.3	56.46	376.14	6778.41	5323.75	501.19
12.3	10.3	10	0.70	0.50	0.93	40.00	55.95	202.2	56.91	394.02	6828.48	5363.07	517.45
12.4	10.4	10	0.70	0.50	0.93	40.00	55.92	204.2	57.35	412.03	6878.48	5402.34	533.83
12.5	10.5	10	0.70	0.50	0.93	40.00	55.89	206.2	57.80	430.19	6928.40	5441.55	550.32
12.6	10.6	10	0.70	0.50	0.93	40.00	55.86	208.1	58.24	448.49	6978.25	5480.71	566.92
12.7	10.7	10	0.70	0.50	0.93	40.00	55.84	210.1	58.69	466.93	7028.03	5519.80	583.63
12.8	10.8	10	0.70	0.50	0.93	40.00	55.81	212.1	59.13	485.50	7077.74	5558.84	600.46
12.9	10.9	10	0.70	0.50	0.93	40.00	55.78	214.0	59.58	504.22	7127.37	5597.82	617.40
13.0	11.0	10	0.70	0.50	0.93	40.00	55.75	216.0	60.02	523.07	7176.92	5636.74	634.44
13.1	11.1	10	0.70	0.50	0.93	40.00	55.72	217.9	60.47	542.07	7226.40	5675.60	651.60
13.2	11.2	10	0.70	0.50	0.93	40.00	55.69	219.9	60.91	561.21	7275.80	5714.40	668.88
13.3	11.3	10	0.70	0.50	0.93	40.00	55.67	221.9	61.36	580.48	7325.13	5753.14	686.26
13.4	11.4	10	0.70	0.50	0.93	40.00	55.64	223.8	61.80	599.90	7374.38	5791.82	703.76
13.5	11.5	10	0.70	0.50	0.93	40.00	55.61	225.8	62.25	619.45	7423.55	5830.44	721.36
13.6	11.6	10	0.70	0.50	0.93	40.00	55.58	227.8	62.69	639.15	7472.64	5869.00	739.08

13.7	11.7	10	0.70	0.50	0.93	40.00	55.55	229.7	63.14	658.98	7521.65	5907.49	756.91
13.8	11.8	10	0.70	0.50	0.93	40.00	55.52	231.7	63.58	678.96	7570.59	5945.92	774.86
13.9	11.9	10	0.70	0.50	0.93	40.00	55.49	233.7	64.02	699.07	7619.44	5984.29	792.91
14.0	12.0	10	0.70	0.50	0.93	40.00	55.46	235.6	64.47	719.32	7668.21	6022.60	811.08
14.1	12.1	10	0.70	0.50	0.93	40.00	55.43	237.6	64.91	739.72	7716.91	6060.84	829.36
14.2	12.2	10	0.70	0.50	0.93	40.00	55.40	239.5	65.36	760.25	7765.52	6099.02	847.75
14.3	12.3	10	0.70	0.50	0.93	40.00	55.37	241.5	65.80	780.92	7814.05	6137.14	866.25
14.4	12.4	10	0.70	0.50	0.93	40.00	55.34	243.5	66.25	801.74	7862.49	6175.19	884.86
14.5	12.5	10	0.70	0.50	0.93	40.00	55.31	245.4	66.69	822.69	7910.86	6213.17	903.59
14.6	12.6	10	0.70	0.50	0.93	40.00	55.27	247.4	67.14	843.78	7959.13	6251.09	922.42
14.7	12.7	10	0.70	0.50	0.93	40.00	55.24	249.4	67.58	865.01	8007.33	6288.94	941.37
14.8	12.8	10	0.70	0.50	0.93	40.00	55.21	251.3	68.03	886.38	8055.44	6326.73	960.43
14.9	12.9	10	0.70	0.50	0.93	40.00	55.18	253.3	68.47	907.89	8103.46	6364.45	979.61
15.0	13.0	10	0.70	0.50	0.93	40.00	55.15	255.3	68.92	929.55	8151.40	6402.10	998.89
15.1	13.1	10	0.70	0.50	0.93	40.00	55.12	257.2	69.36	951.34	8199.26	6439.68	1018.29
15.2	13.2	10	0.70	0.50	0.93	40.00	55.08	259.2	69.81	973.27	8247.02	6477.20	1037.79
15.3	13.3	10	0.70	0.50	0.93	40.00	55.05	261.1	70.25	995.34	8294.70	6514.64	1057.41
15.4	13.4	10	0.70	0.50	0.93	40.00	55.02	263.1	70.70	1017.55	8342.29	6552.02	1077.15
15.5	13.5	10	0.70	0.50	0.93	40.00	54.99	265.1	71.14	1039.90	8389.79	6589.33	1096.99
15.6	13.6	10	0.70	0.50	0.93	40.00	54.95	267.0	71.59	1062.39	8437.20	6626.56	1116.94
15.7	13.7	10	0.70	0.50	0.93	40.00	54.92	269.0	72.03	1085.02	8484.52	6663.73	1137.01
15.8	13.8	10	0.70	0.50	0.93	40.00	54.89	271.0	72.48	1107.78	8531.76	6700.83	1157.19
15.9	13.9	10	0.70	0.50	0.93	40.00	54.85	272.9	72.92	1130.69	8578.90	6737.85	1177.48
16.0	14.0	10	0.70	0.50	0.93	40.00	54.82	274.9	73.37	1153.74	8625.94	6774.80	1197.88
16.1	14.1	10	0.70	0.50	0.93	40.00	54.79	276.9	73.81	1176.93	8672.90	6811.68	1218.40
16.2	14.2	10	0.70	0.50	0.93	40.00	54.75	278.8	74.26	1200.26	8719.77	6848.49	1239.02
16.3	14.3	10	0.70	0.50	0.93	40.00	54.72	280.8	74.70	1223.73	8766.54	6885.22	1259.76
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1223.73	0.00	0.00	1261.72
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1223.73	0.00	0.00	1263.69
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1223.73	0.00	0.00	1265.65
16.7	14.7	12	0.70	0.50	0.86	37.70	43.75	288.6	70.54	1245.89	7176.21	5636.18	1285.34
16.8	14.8	12	0.70	0.50	0.86	37.70	43.72	290.6	70.95	1268.18	7213.17	5665.21	1305.14
16.9	14.9	12	0.70	0.50	0.86	37.70	43.69	292.6	71.36	1290.60	7250.05	5694.18	1325.04
17.0	15.0	12	0.70	0.50	0.86	37.70	43.66	294.5	71.77	1313.15	7286.85	5723.08	1345.04

1.2.4.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1029	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.70	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	1.26
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	2.51
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	3.77
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	5.03
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	6.28
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	7.54
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	8.80
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	10.05
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	12.57
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	13.82
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	15.08
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	16.34
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	17.59
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	18.85
3.6	1.6	3	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	20.11
3.7	1.7	3	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	21.36
3.8	1.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
3.9	1.9	3	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	23.88
4.0	2.0	3	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	25.13
4.1	2.1	3	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	26.39
4.2	2.2	4	0.70	0.50	0.40	19.00	3.57	27.6	17.50	4.40	305.66	153.64	31.16

4.3	2.3	4	0.70	0.50	0.40	19.00	3.57	28.9	17.50	8.80	307.49	154.56	35.94
4.4	2.4	4	0.70	0.50	0.40	19.00	3.57	30.2	17.50	13.19	309.32	155.48	40.72
4.5	2.5	4	0.70	0.50	0.40	19.00	3.57	31.4	17.50	17.59	311.16	156.40	45.49
4.6	2.6	4	0.70	0.50	0.40	19.00	3.57	32.7	17.50	21.99	312.99	157.33	50.27
4.7	2.7	4	0.70	0.50	0.40	19.00	3.57	33.9	17.50	26.39	314.82	158.25	55.04
4.8	2.8	4	0.70	0.50	0.40	19.00	3.57	35.2	17.50	30.79	316.66	159.17	59.82
4.9	2.9	5	0.70	0.50	0.00	0.00	0.00	36.4	0.00	30.79	0.00	0.00	61.07
5.0	3.0	5	0.70	0.50	0.00	0.00	0.00	37.7	0.00	30.79	0.00	0.00	62.33
5.1	3.1	5	0.70	0.50	0.00	0.00	0.00	39.0	0.00	30.79	0.00	0.00	63.59
5.2	3.2	5	0.70	0.50	0.00	0.00	0.00	40.2	0.00	30.79	0.00	0.00	64.84
5.3	3.3	5	0.70	0.50	0.00	0.00	0.00	41.5	0.00	30.79	0.00	0.00	66.10
5.4	3.4	5	0.70	0.50	0.00	0.00	0.00	42.7	0.00	30.79	0.00	0.00	67.36
5.5	3.5	5	0.70	0.50	0.00	0.00	0.00	44.0	0.00	30.79	0.00	0.00	68.61
5.6	3.6	5	0.70	0.50	0.00	0.00	0.00	45.2	0.00	30.79	0.00	0.00	69.87
5.7	3.7	5	0.70	0.50	0.00	0.00	0.00	46.5	0.00	30.79	0.00	0.00	71.13
5.8	3.8	5	0.70	0.50	0.00	0.00	0.00	47.8	0.00	30.79	0.00	0.00	72.38
5.9	3.9	6	0.62	0.50	0.40	19.00	3.57	49.0	21.70	36.24	427.84	215.06	78.00
6.0	4.0	6	0.62	0.50	0.40	19.00	3.57	50.3	21.70	41.70	429.67	215.98	83.62
6.1	4.1	6	0.62	0.50	0.40	19.00	3.57	51.5	21.70	47.15	431.51	216.90	89.24
6.2	4.2	6	0.62	0.50	0.40	19.00	3.57	52.8	21.70	52.60	433.34	217.82	94.86
6.3	4.3	6	0.62	0.50	0.40	19.00	3.57	54.0	21.70	58.06	435.17	218.74	100.48
6.4	4.4	6	0.62	0.50	0.40	19.00	3.57	55.3	21.70	63.51	437.00	219.66	106.10
6.5	4.5	6	0.62	0.50	0.40	19.00	3.57	56.5	21.70	68.96	438.84	220.58	111.72
6.6	4.6	6	0.62	0.50	0.40	19.00	3.57	57.8	21.70	74.42	440.67	221.50	117.34
6.7	4.7	6	0.62	0.50	0.40	19.00	3.57	59.1	21.70	79.87	442.50	222.43	122.96
6.8	4.8	6	0.62	0.50	0.40	19.00	3.57	60.3	21.70	85.33	444.34	223.35	128.58
6.9	4.9	6	0.62	0.50	0.40	19.00	3.57	61.6	21.70	90.78	446.17	224.27	134.20
7.0	5.0	6	0.62	0.50	0.40	19.00	3.57	62.8	21.70	96.23	448.00	225.19	139.82
7.1	5.1	6	0.62	0.50	0.40	19.00	3.57	64.1	21.70	101.69	449.84	226.11	145.44
7.2	5.2	6	0.62	0.50	0.40	19.00	3.57	65.3	21.70	107.14	451.67	227.03	151.06
7.3	5.3	6	0.62	0.50	0.40	19.00	3.57	66.6	21.70	112.59	453.50	227.95	156.68
7.4	5.4	6	0.62	0.50	0.40	19.00	3.57	67.9	21.70	118.05	455.33	228.88	162.30
7.5	5.5	6	0.62	0.50	0.40	19.00	3.57	69.1	21.70	123.50	457.17	229.80	167.92
7.6	5.6	6	0.62	0.50	0.40	19.00	3.57	70.4	21.70	128.96	459.00	230.72	173.54
7.7	5.7	6	0.62	0.50	0.40	19.00	3.57	71.6	21.70	134.41	460.83	231.64	179.16
7.8	5.8	6	0.62	0.50	0.40	19.00	3.57	72.9	21.70	139.86	462.67	232.56	184.78
7.9	5.9	7	0.70	0.50	0.00	0.00	0.00	74.1	0.00	139.86	0.00	0.00	186.03
8.0	6.0	7	0.70	0.50	0.00	0.00	0.00	75.4	0.00	139.86	0.00	0.00	187.29
8.1	6.1	7	0.70	0.50	0.00	0.00	0.00	76.7	0.00	139.86	0.00	0.00	188.55
8.2	6.2	7	0.70	0.50	0.00	0.00	0.00	77.9	0.00	139.86	0.00	0.00	189.80
8.3	6.3	7	0.70	0.50	0.00	0.00	0.00	79.2	0.00	139.86	0.00	0.00	191.06
8.4	6.4	7	0.70	0.50	0.00	0.00	0.00	80.4	0.00	139.86	0.00	0.00	192.32
8.5	6.5	7	0.70	0.50	0.00	0.00	0.00	81.7	0.00	139.86	0.00	0.00	193.57
8.6	6.6	7	0.70	0.50	0.00	0.00	0.00	82.9	0.00	139.86	0.00	0.00	194.83
8.7	6.7	7	0.70	0.50	0.00	0.00	0.00	84.2	0.00	139.86	0.00	0.00	196.09
8.8	6.8	8	0.58	0.50	0.40	19.00	3.56	85.5	23.20	145.69	526.91	264.86	202.01
8.9	6.9	8	0.58	0.50	0.40	19.00	3.55	86.7	23.20	151.53	528.75	265.78	207.93

9.0	7.0	8	0.58	0.50	0.40	19.00	3.55	88.0	23.20	157.36	530.58	266.70	213.85
9.1	7.1	8	0.58	0.50	0.40	19.00	3.55	89.2	23.20	163.19	532.41	267.62	219.77
9.2	7.2	8	0.58	0.50	0.40	19.00	3.54	90.5	23.20	169.02	534.25	268.54	225.69
9.3	7.3	8	0.58	0.50	0.40	19.00	3.54	91.7	23.20	174.85	536.08	269.46	231.61
9.4	7.4	8	0.58	0.50	0.40	19.00	3.54	93.0	23.20	180.68	537.91	270.38	237.53
9.5	7.5	8	0.58	0.50	0.40	19.00	3.53	94.2	23.20	186.51	539.75	271.31	243.46
9.6	7.6	8	0.58	0.50	0.40	19.00	3.53	95.5	23.20	192.34	541.58	272.23	249.38
9.7	7.7	8	0.58	0.50	0.40	19.00	3.53	96.8	23.20	198.17	543.41	273.15	255.30
9.8	7.8	8	0.58	0.50	0.40	19.00	3.52	98.0	23.20	204.00	545.24	274.07	261.22
9.9	7.9	8	0.58	0.50	0.40	19.00	3.52	99.3	23.20	209.83	547.08	274.99	267.14
10.0	8.0	8	0.58	0.50	0.40	19.00	3.52	100.5	23.20	215.66	548.91	275.91	273.06
10.1	8.1	8	0.58	0.50	0.40	19.00	3.51	101.8	23.20	221.49	550.74	276.83	278.98
10.2	8.2	8	0.58	0.50	0.40	19.00	3.51	103.0	23.20	227.33	552.58	277.75	284.90
10.3	8.3	8	0.58	0.50	0.40	19.00	3.51	104.3	23.20	233.16	554.41	278.68	290.83
10.4	8.4	8	0.58	0.50	0.40	19.00	3.50	105.6	23.20	238.99	556.24	279.60	296.75
10.5	8.5	8	0.58	0.50	0.40	19.00	3.50	106.8	23.20	244.82	558.08	280.52	302.67
10.6	8.6	9	0.70	0.50	0.00	0.00	0.00	108.1	0.00	244.82	0.00	0.00	303.93
10.7	8.7	9	0.70	0.50	0.00	0.00	0.00	109.3	0.00	244.82	0.00	0.00	305.18
10.8	8.8	9	0.70	0.50	0.00	0.00	0.00	110.6	0.00	244.82	0.00	0.00	306.44
10.9	8.9	9	0.70	0.50	0.00	0.00	0.00	111.8	0.00	244.82	0.00	0.00	307.70
11.0	9.0	9	0.70	0.50	0.00	0.00	0.00	113.1	0.00	244.82	0.00	0.00	308.95
11.1	9.1	9	0.70	0.50	0.00	0.00	0.00	114.4	0.00	244.82	0.00	0.00	310.21
11.2	9.2	9	0.70	0.50	0.00	0.00	0.00	115.6	0.00	244.82	0.00	0.00	311.47
11.3	9.3	9	0.70	0.50	0.00	0.00	0.00	116.9	0.00	244.82	0.00	0.00	312.72
11.4	9.4	9	0.70	0.50	0.00	0.00	0.00	118.1	0.00	244.82	0.00	0.00	313.98
11.5	9.5	9	0.70	0.50	0.00	0.00	0.00	119.4	0.00	244.82	0.00	0.00	315.23
11.6	9.6	9	0.70	0.50	0.00	0.00	0.00	120.6	0.00	244.82	0.00	0.00	316.49
11.7	9.7	9	0.70	0.50	0.00	0.00	0.00	121.9	0.00	244.82	0.00	0.00	317.75
11.8	9.8	9	0.70	0.50	0.00	0.00	0.00	123.2	0.00	244.82	0.00	0.00	319.00
11.9	9.9	10	0.70	0.50	0.93	40.00	55.34	124.4	55.13	258.67	6543.64	3289.19	331.35
12.0	10.0	10	0.70	0.50	0.93	40.00	55.31	125.7	55.57	272.64	6591.83	3313.41	343.78
12.1	10.1	10	0.70	0.50	0.93	40.00	55.27	126.9	56.02	286.72	6639.91	3337.58	356.30
12.2	10.2	10	0.70	0.50	0.93	40.00	55.23	128.2	56.46	300.91	6687.89	3361.70	368.90
12.3	10.3	10	0.70	0.50	0.93	40.00	55.19	129.4	56.91	315.21	6735.76	3385.76	381.60
12.4	10.4	10	0.70	0.50	0.93	40.00	55.15	130.7	57.35	329.63	6783.52	3409.77	394.39
12.5	10.5	10	0.70	0.50	0.93	40.00	55.11	131.9	57.80	344.15	6831.17	3433.72	407.27
12.6	10.6	10	0.70	0.50	0.93	40.00	55.07	133.2	58.24	358.79	6878.71	3457.62	420.24
12.7	10.7	10	0.70	0.50	0.93	40.00	55.03	134.5	58.69	373.54	6926.14	3481.46	433.29
12.8	10.8	10	0.70	0.50	0.93	40.00	54.99	135.7	59.13	388.40	6973.46	3505.24	446.44
12.9	10.9	10	0.70	0.50	0.93	40.00	54.95	137.0	59.58	403.37	7020.66	3528.97	459.67
13.0	11.0	10	0.70	0.50	0.93	40.00	54.90	138.2	60.02	418.46	7067.75	3552.64	473.00
13.1	11.1	10	0.70	0.50	0.93	40.00	54.86	139.5	60.47	433.66	7114.73	3576.25	486.41
13.2	11.2	10	0.70	0.50	0.93	40.00	54.82	140.7	60.91	448.97	7161.59	3599.81	499.92
13.3	11.3	10	0.70	0.50	0.93	40.00	54.78	142.0	61.36	464.39	7208.33	3623.30	513.51
13.4	11.4	10	0.70	0.50	0.93	40.00	54.74	143.3	61.80	479.92	7254.96	3646.74	527.19
13.5	11.5	10	0.70	0.50	0.93	40.00	54.69	144.5	62.25	495.56	7301.47	3670.12	540.96
13.6	11.6	10	0.70	0.50	0.93	40.00	54.65	145.8	62.69	511.32	7347.86	3693.44	554.82

13.7	11.7	10	0.70	0.50	0.93	40.00	54.61	147.0	63.14	527.19	7394.13	3716.70	568.77
13.8	11.8	10	0.70	0.50	0.93	40.00	54.56	148.3	63.58	543.16	7440.28	3739.89	582.81
13.9	11.9	10	0.70	0.50	0.93	40.00	54.52	149.5	64.02	559.26	7486.31	3763.03	596.94
14.0	12.0	10	0.70	0.50	0.93	40.00	54.47	150.8	64.47	575.46	7532.21	3786.10	611.16
14.1	12.1	10	0.70	0.50	0.93	40.00	54.43	152.1	64.91	591.77	7577.99	3809.11	625.47
14.2	12.2	10	0.70	0.50	0.93	40.00	54.39	153.3	65.36	608.20	7623.65	3832.06	639.87
14.3	12.3	10	0.70	0.50	0.93	40.00	54.34	154.6	65.80	624.74	7669.18	3854.95	654.36
14.4	12.4	10	0.70	0.50	0.93	40.00	54.30	155.8	66.25	641.39	7714.58	3877.77	668.93
14.5	12.5	10	0.70	0.50	0.93	40.00	54.25	157.1	66.69	658.15	7759.86	3900.53	683.60
14.6	12.6	10	0.70	0.50	0.93	40.00	54.20	158.3	67.14	675.02	7805.01	3923.22	698.36
14.7	12.7	10	0.70	0.50	0.93	40.00	54.16	159.6	67.58	692.01	7850.02	3945.85	713.20
14.8	12.8	10	0.70	0.50	0.93	40.00	54.11	160.8	68.03	709.11	7894.91	3968.42	728.13
14.9	12.9	10	0.70	0.50	0.93	40.00	54.08	162.1	68.47	726.32	7942.36	3992.26	743.16
15.0	13.0	10	0.70	0.50	0.93	40.00	54.05	163.4	68.92	743.64	7989.75	4016.09	758.27
15.1	13.1	10	0.70	0.50	0.93	40.00	54.03	164.6	69.36	761.07	8037.09	4039.88	773.47
15.2	13.2	10	0.70	0.50	0.93	40.00	54.00	165.9	69.81	778.61	8084.38	4063.65	788.77
15.3	13.3	10	0.70	0.50	0.93	40.00	53.97	167.1	70.25	796.27	8131.61	4087.40	804.15
15.4	13.4	10	0.70	0.50	0.93	40.00	53.94	168.4	70.70	814.04	8178.80	4111.11	819.62
15.5	13.5	10	0.70	0.50	0.93	40.00	53.91	169.6	71.14	831.92	8225.93	4134.80	835.18
15.6	13.6	10	0.70	0.50	0.93	40.00	53.88	170.9	71.59	849.91	8273.01	4158.47	850.83
15.7	13.7	10	0.70	0.50	0.93	40.00	53.86	172.2	72.03	868.01	8320.04	4182.11	866.57
15.8	13.8	10	0.70	0.50	0.93	40.00	53.83	173.4	72.48	886.23	8367.02	4205.72	882.40
15.9	13.9	10	0.70	0.50	0.93	40.00	53.80	174.7	72.92	904.55	8413.94	4229.31	898.32
16.0	14.0	10	0.70	0.50	0.93	40.00	53.77	175.9	73.37	922.99	8460.82	4252.87	914.32
16.1	14.1	10	0.70	0.50	0.93	40.00	53.74	177.2	73.81	941.54	8507.64	4276.41	930.42
16.2	14.2	10	0.70	0.50	0.93	40.00	53.71	178.4	74.26	960.21	8554.41	4299.92	946.61
16.3	14.3	10	0.70	0.50	0.93	40.00	53.69	179.7	74.70	978.98	8601.13	4323.40	962.88
16.4	14.4	11	0.70	0.50	0.00	0.00	0.00	181.0	0.00	978.98	0.00	0.00	964.14
16.5	14.5	11	0.70	0.50	0.00	0.00	0.00	182.2	0.00	978.98	0.00	0.00	965.40
16.6	14.6	11	0.70	0.50	0.00	0.00	0.00	183.5	0.00	978.98	0.00	0.00	966.65
16.7	14.7	12	0.70	0.50	0.86	37.70	42.94	184.7	70.54	996.71	7043.12	3540.26	982.09
16.8	14.8	12	0.70	0.50	0.86	37.70	42.92	186.0	70.95	1014.54	7080.42	3559.01	997.62
16.9	14.9	12	0.70	0.50	0.86	37.70	42.89	187.2	71.36	1032.48	7117.68	3577.74	1013.22
17.0	15.0	12	0.70	0.50	0.86	37.70	42.87	188.5	71.77	1050.52	7154.90	3596.45	1028.91

1.2.5 Calcolo del carico limite con riferimento alla prova CPTu3

1.2.5.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	3.3	19.35	35		0.70	0.50	0.70
2	2.5	4.4	19.35	35		0.70	0.50	0.70
3	4.4	5.2	18.33	22	30	0.66	0.50	0.40
4	5.2	5.9	19.35	35		0.70	0.50	0.70
5	5.9	9.7	18.33	22	30	0.66	0.50	0.40
6	9.7	10.5	19.35	38		0.70	0.50	0.79
7	10.5	11.6	18.33	22	80	0.35	0.50	0.40
8	11.6	11.9	19.35	36		0.70	0.50	0.73
9	11.9	13.4	19.35	42		0.70	0.50	0.90
10	13.4	14.5	19.35	36		0.70	0.50	0.73
11	14.5	16.2	19.35	41		0.70	0.50	0.86
12	16.2	17.2	19.35	36		0.70	0.50	0.73
13	17.2	19.8	19.35	41		0.70	0.50	0.86
14	19.8	26.0	19.35	36		0.70	0.50	0.73
15	26.0	29.6	18.33	22	150	0.35	0.50	0.40

1.2.5.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1973	1896

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	2.8	10.45	3.94	737.02	833.55	5.98	10.45	3.94	737.02	833.55	5.98
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	5.7	10.78	8.00	760.58	860.19	12.06	10.78	8.00	760.58	860.19	12.06
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	8.5	11.12	12.19	784.14	886.84	18.24	11.12	12.19	784.14	886.84	18.24
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	11.3	11.45	16.51	807.70	913.49	24.52	11.45	16.51	807.70	913.49	24.52
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	14.1	11.78	20.95	831.26	940.13	30.90	11.78	20.95	831.26	940.13	30.90
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	17.0	12.12	25.52	854.82	966.78	37.38	12.12	25.52	854.82	966.78	37.38
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	19.8	12.45	30.22	878.38	993.42	43.97	12.45	30.22	878.38	993.42	43.97
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	22.6	12.79	35.04	901.94	1020.07	50.65	12.79	35.04	901.94	1020.07	50.65
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	25.4	13.12	39.98	925.50	1046.71	57.43	13.12	39.98	925.50	1046.71	57.43
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	28.3	13.45	45.06	949.06	1073.36	64.32	13.45	45.06	949.06	1073.36	64.32
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	31.1	13.79	50.25	972.62	1100.00	71.31	13.79	50.25	972.62	1100.00	71.31
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	33.9	14.12	55.58	996.18	1126.65	78.39	14.12	55.58	996.18	1126.65	78.39
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	36.8	14.46	61.03	1019.74	1153.29	85.58	14.46	61.03	1019.74	1153.29	85.58
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	39.6	14.76	66.59	1037.26	1173.11	92.86	14.76	66.59	1037.26	1173.11	92.86
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	42.4	15.10	72.28	1060.68	1199.60	100.24	15.10	72.28	1060.68	1199.60	100.24
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	45.2	15.43	78.10	1084.11	1226.09	107.72	15.43	78.10	1084.11	1226.09	107.72
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	48.1	15.76	84.04	1107.53	1252.59	115.30	15.76	84.04	1107.53	1252.59	115.30
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	50.9	16.10	90.11	1130.95	1279.08	122.98	16.10	90.11	1130.95	1279.08	122.98
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	53.7	16.43	96.31	1154.38	1305.57	130.77	16.43	96.31	1154.38	1305.57	130.77
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	56.5	16.76	102.63	1177.80	1332.06	138.65	16.76	102.63	1177.80	1332.06	138.65
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	59.4	17.10	109.07	1201.22	1358.55	146.63	17.10	109.07	1201.22	1358.55	146.63
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	62.2	17.43	115.64	1224.65	1385.04	154.72	17.43	115.64	1224.65	1385.04	154.72
4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	65.0	17.76	122.34	1248.07	1411.53	162.90	17.76	122.34	1248.07	1411.53	162.90

Breve termine

Lungo termine

Palo

4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	67.9	18.10	129.16	1271.49	1438.02	171.19	18.10	129.16	1271.49	1438.02	171.19
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	70.7	19.80	136.63	356.97	403.73	179.99	10.63	133.17	187.77	212.37	177.22
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	73.5	19.80	144.09	358.81	405.80	188.79	10.81	137.24	190.81	215.80	183.31
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	76.3	19.80	151.55	360.64	407.87	197.58	10.98	141.38	193.85	219.24	189.45
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	79.2	19.80	159.02	362.47	409.95	206.38	11.15	145.59	196.89	222.68	195.64
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	82.0	19.80	166.48	364.31	412.02	215.18	11.32	149.85	199.93	226.11	201.88
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	84.8	19.80	173.95	366.14	414.09	223.98	11.49	154.19	202.97	229.55	208.17
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	87.7	19.80	181.41	367.97	416.17	232.78	11.67	158.59	206.01	232.99	214.52
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	90.5	19.80	188.88	369.80	418.24	241.58	11.84	163.05	209.05	236.43	220.92
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	93.3	20.81	196.72	1462.27	1653.79	250.68	20.81	170.89	1462.27	1653.79	230.02
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	96.1	21.15	204.69	1485.69	1680.28	259.89	21.15	178.87	1485.69	1680.28	239.23
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	99.0	21.48	212.79	1509.11	1706.77	269.19	21.48	186.96	1509.11	1706.77	248.53
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	101.8	21.81	221.01	1532.54	1733.26	278.60	21.81	195.19	1532.54	1733.26	257.94
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	104.6	22.15	229.36	1555.96	1759.75	288.11	22.15	203.54	1555.96	1759.75	267.44
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	107.4	22.48	237.84	1579.38	1786.24	297.71	22.48	212.01	1579.38	1786.24	277.05
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	110.3	22.81	246.44	1602.81	1812.73	307.42	22.81	220.61	1602.81	1812.73	286.76
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	253.90	385.18	435.63	316.22	13.36	225.65	235.91	266.81	293.61
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	261.37	387.02	437.70	325.02	13.53	230.75	238.95	270.24	300.52
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	268.83	388.85	439.78	333.82	13.70	235.91	241.99	273.68	307.48
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	276.30	390.68	441.85	342.62	13.88	241.14	245.03	277.12	314.50
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	283.76	392.51	443.92	351.42	14.05	246.44	248.07	280.56	321.56
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	291.22	394.35	446.00	360.21	14.22	251.80	251.10	283.99	328.68
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	298.69	396.18	448.07	369.01	14.39	257.23	254.14	287.43	335.84
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	306.15	398.01	450.14	377.81	14.56	262.72	257.18	290.87	343.06
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	313.62	399.85	452.22	386.61	14.74	268.27	260.22	294.30	350.34
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	321.08	401.68	454.29	395.41	14.91	273.89	263.26	297.74	357.66
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	328.55	403.51	456.36	404.21	15.08	279.58	266.30	301.18	365.03
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	336.01	405.35	458.43	413.01	15.25	285.33	269.34	304.62	372.46
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	343.48	407.18	460.51	421.81	15.42	291.14	272.38	308.05	379.94
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	350.94	409.01	462.58	430.61	15.60	297.02	275.42	311.49	387.47
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	358.40	410.84	464.65	439.40	15.77	302.97	278.46	314.93	395.06
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	365.87	412.68	466.73	448.20	15.94	308.98	281.50	318.37	402.69
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	373.33	414.51	468.80	457.00	16.11	315.05	284.54	321.80	410.38
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	380.80	416.34	470.87	465.80	16.29	321.19	287.58	325.24	418.12
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	388.26	418.18	472.95	474.60	16.46	327.40	290.62	328.68	425.91
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	395.73	420.01	475.02	483.40	16.63	333.67	293.65	332.12	433.75
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	403.19	421.84	477.09	492.20	16.80	340.00	296.69	335.55	441.65
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	410.66	423.68	479.17	501.00	16.97	346.40	299.73	338.99	449.59
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	418.12	425.51	481.24	509.80	17.15	352.86	302.77	342.43	457.59
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	425.58	427.34	483.31	518.60	17.32	359.39	305.81	345.86	465.64
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	433.05	429.17	485.38	527.39	17.49	365.99	308.85	349.30	473.74
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	440.51	431.01	487.46	536.19	17.66	372.64	311.89	352.74	481.90
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	447.98	432.84	489.53	544.99	17.83	379.37	314.93	356.18	490.10
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	455.44	434.67	491.60	553.79	18.01	386.16	317.97	359.61	498.36
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	462.91	436.51	493.68	562.59	18.18	393.01	321.01	363.05	506.67
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	470.37	438.34	495.75	571.39	18.35	399.93	324.05	366.49	515.03
9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	477.84	440.17	497.82	580.19	18.52	406.91	327.09	369.93	523.45

9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	485.30	442.01	499.90	588.99	18.70	413.96	330.13	373.36	531.91
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	492.76	443.84	501.97	597.79	18.87	421.07	333.17	376.80	540.43
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	500.23	445.67	504.04	606.59	19.04	428.25	336.20	380.24	549.00
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	507.69	447.50	506.12	615.38	19.21	435.49	339.24	383.68	557.62
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	515.16	449.34	508.19	624.18	19.38	442.80	342.28	387.11	566.30
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	522.62	451.17	510.26	632.98	19.56	450.17	345.32	390.55	575.02
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	530.09	453.00	512.33	641.78	19.73	457.61	348.36	393.99	583.80
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	220.5	39.08	544.82	3542.49	4006.46	656.39	39.08	472.34	3542.49	4006.46	598.41
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	223.4	39.46	559.69	3576.76	4045.22	671.12	39.46	487.22	3576.76	4045.22	613.14
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	226.2	39.83	574.71	3611.03	4083.98	685.96	39.83	502.23	3611.03	4083.98	627.98
10.1	8.1	6	0.70	0.50	0.79	35.40	35.92	229.0	40.21	589.87	3645.30	4122.74	700.92	40.21	517.39	3645.30	4122.74	642.94
10.2	8.2	6	0.70	0.50	0.79	35.40	35.92	231.8	40.59	605.17	3679.57	4161.50	715.99	40.59	532.70	3679.57	4161.50	658.01
10.3	8.3	6	0.70	0.50	0.79	35.40	35.92	234.7	40.97	620.62	3713.85	4200.26	731.17	40.97	548.14	3713.85	4200.26	673.19
10.4	8.4	6	0.70	0.50	0.79	35.40	35.92	237.5	41.35	636.21	3748.12	4239.02	746.47	41.35	563.73	3748.12	4239.02	688.49
10.5	8.5	6	0.70	0.50	0.79	35.40	35.92	240.3	41.73	651.94	3782.39	4277.78	761.88	41.73	579.46	3782.39	4277.78	703.90
10.6	8.6	7	0.35	0.50	0.40	19.00	3.57	243.2	28.00	662.49	920.32	1040.85	773.15	21.44	587.54	378.63	428.22	713.19
10.7	8.7	7	0.35	0.50	0.40	19.00	3.57	246.0	28.00	673.05	922.15	1042.93	784.42	21.61	595.69	381.67	431.65	722.54
10.8	8.8	7	0.35	0.50	0.40	19.00	3.57	248.8	28.00	683.60	923.98	1045.00	795.70	21.79	603.90	384.70	435.09	731.94
10.9	8.9	7	0.35	0.50	0.40	19.00	3.57	251.6	28.00	694.16	925.82	1047.07	806.97	21.96	612.18	387.74	438.53	741.39
11.0	9.0	7	0.35	0.50	0.40	19.00	3.57	254.5	28.00	704.71	927.65	1049.15	818.24	22.13	620.52	390.78	441.97	750.89
11.1	9.1	7	0.35	0.50	0.40	19.00	3.57	257.3	28.00	715.27	929.48	1051.22	829.51	22.30	628.93	393.82	445.40	760.44
11.2	9.2	7	0.35	0.50	0.40	19.00	3.57	260.1	28.00	725.83	931.31	1053.29	840.78	22.47	637.40	396.86	448.84	770.05
11.3	9.3	7	0.35	0.50	0.40	19.00	3.57	263.0	28.00	736.38	933.15	1055.36	852.06	22.65	645.94	399.90	452.28	779.70
11.4	9.4	7	0.35	0.50	0.40	19.00	3.57	265.8	28.00	746.94	934.98	1057.44	863.33	22.82	654.54	402.94	455.71	789.41
11.5	9.5	7	0.35	0.50	0.40	19.00	3.57	268.6	28.00	757.49	936.81	1059.51	874.60	22.99	663.21	405.98	459.15	799.17
11.6	9.6	7	0.35	0.50	0.40	19.00	3.57	271.4	28.00	768.05	938.65	1061.58	885.87	23.16	671.94	409.02	462.59	808.99
11.7	9.7	8	0.70	0.50	0.73	33.10	27.98	274.3	42.15	783.94	3235.45	3659.21	901.41	42.15	687.83	3235.45	3659.21	824.53
11.8	9.8	8	0.70	0.50	0.73	33.10	27.97	277.1	42.50	799.96	3260.82	3687.90	917.06	42.50	703.86	3260.82	3687.90	840.17
11.9	9.9	8	0.70	0.50	0.73	33.10	27.96	279.9	42.85	816.12	3286.16	3716.56	932.81	42.85	720.01	3286.16	3716.56	855.92
12.0	10.0	9	0.70	0.50	0.90	38.85	50.66	282.7	53.06	836.12	6001.94	6788.03	951.64	53.06	740.01	6001.94	6788.03	874.75
12.1	10.1	9	0.70	0.50	0.90	38.85	50.64	285.6	53.49	856.28	6048.05	6840.18	970.60	53.49	760.18	6048.05	6840.18	893.71
12.2	10.2	9	0.70	0.50	0.90	38.85	50.62	288.4	53.91	876.61	6094.11	6892.27	989.68	53.91	780.50	6094.11	6892.27	912.80
12.3	10.3	9	0.70	0.50	0.90	38.85	50.60	291.2	54.34	897.09	6140.12	6944.31	1008.90	54.34	800.99	6140.12	6944.31	932.02
12.4	10.4	9	0.70	0.50	0.90	38.85	50.58	294.1	54.77	917.74	6186.09	6996.30	1028.24	54.77	821.63	6186.09	6996.30	951.36
12.5	10.5	9	0.70	0.50	0.90	38.85	50.57	296.9	55.19	938.55	6232.00	7048.23	1047.72	55.19	842.44	6232.00	7048.23	970.83
12.6	10.6	9	0.70	0.50	0.90	38.85	50.55	299.7	55.62	959.52	6277.87	7100.11	1067.32	55.62	863.41	6277.87	7100.11	990.44
12.7	10.7	9	0.70	0.50	0.90	38.85	50.53	302.5	56.05	980.65	6323.69	7151.93	1087.05	56.05	884.54	6323.69	7151.93	1010.17
12.8	10.8	9	0.70	0.50	0.90	38.85	50.51	305.4	56.48	1001.94	6369.47	7203.70	1106.91	56.48	905.83	6369.47	7203.70	1030.03
12.9	10.9	9	0.70	0.50	0.90	38.85	50.49	308.2	56.90	1023.39	6415.19	7255.41	1126.90	56.90	927.28	6415.19	7255.41	1050.02
13.0	11.0	9	0.70	0.50	0.90	38.85	50.47	311.0	57.33	1045.00	6460.86	7307.06	1147.02	57.33	948.90	6460.86	7307.06	1070.13
13.1	11.1	9	0.70	0.50	0.90	38.85	50.45	313.8	57.76	1066.78	6506.48	7358.66	1167.27	57.76	970.67	6506.48	7358.66	1090.38
13.2	11.2	9	0.70	0.50	0.90	38.85	50.43	316.7	58.18	1088.71	6552.06	7410.20	1187.64	58.18	992.60	6552.06	7410.20	1110.76
13.3	11.3	9	0.70	0.50	0.90	38.85	50.41	319.5	58.61	1110.81	6597.58	7461.69	1208.15	58.61	1014.70	6597.58	7461.69	1131.26
13.4	11.4	9	0.70	0.50	0.90	38.85	50.39	322.3	59.04	1133.06	6643.05	7513.11	1228.78	59.04	1036.96	6643.05	7513.11	1151.89
13.5	11.5	10	0.70	0.50	0.73	33.10	27.77	325.2	48.41	1151.32	3687.68	4170.67	1246.21	48.41	1055.21	3687.68	4170.67	1169.32
13.6	11.6	10	0.70	0.50	0.73	33.10	27.76	328.0	48.76	1169.70	3712.52	4198.76	1263.74	48.76	1073.59	3712.52	4198.76	1186.86
13.7	11.7	10	0.70	0.50	0.73	33.10	27.75	330.8	49.11	1188.21	3737.33	4226.82	1281.38	49.11	1092.11	3737.33	4226.82	1204.50

13.8	11.8	10	0.70	0.50	0.73	33.10	27.73	333.6	49.46	1206.86	3762.11	4254.85	1299.12	49.46	1110.75	3762.11	4254.85	1222.24
13.9	11.9	10	0.70	0.50	0.73	33.10	27.72	336.5	49.81	1225.63	3786.86	4282.84	1316.97	49.81	1129.53	3786.86	4282.84	1240.09
14.0	12.0	10	0.70	0.50	0.73	33.10	27.71	339.3	50.15	1244.54	3811.58	4310.79	1334.93	50.15	1148.44	3811.58	4310.79	1258.04
14.1	12.1	10	0.70	0.50	0.73	33.10	27.70	342.1	50.50	1263.58	3836.26	4338.71	1352.98	50.50	1167.48	3836.26	4338.71	1276.10
14.2	12.2	10	0.70	0.50	0.73	33.10	27.68	344.9	50.85	1282.75	3860.92	4366.60	1371.15	50.85	1186.65	3860.92	4366.60	1294.26
14.3	12.3	10	0.70	0.50	0.73	33.10	27.67	347.8	51.20	1302.05	3885.54	4394.44	1389.42	51.20	1205.95	3885.54	4394.44	1312.53
14.4	12.4	10	0.70	0.50	0.73	33.10	27.66	350.6	51.55	1321.48	3910.13	4422.25	1407.79	51.55	1225.38	3910.13	4422.25	1330.90
14.5	12.5	10	0.70	0.50	0.73	33.10	27.65	353.4	51.89	1341.05	3934.69	4450.03	1426.27	51.89	1244.94	3934.69	4450.03	1349.38
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	1364.28	6424.74	7266.21	1447.68	61.62	1268.17	6424.74	7266.21	1370.79
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	1387.66	6464.73	7311.44	1469.21	62.03	1291.56	6464.73	7311.44	1392.33
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	1411.20	6504.67	7356.61	1490.87	62.44	1315.10	6504.67	7356.61	1413.99
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	1434.90	6544.56	7401.73	1512.66	62.85	1338.79	6544.56	7401.73	1435.77
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1458.74	6584.40	7446.78	1534.56	63.26	1362.64	6584.40	7446.78	1457.68
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1482.75	6624.19	7491.78	1556.59	63.67	1386.64	6624.19	7491.78	1479.71
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1506.91	6663.93	7536.72	1578.75	64.08	1410.80	6663.93	7536.72	1501.86
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1531.22	6703.61	7581.61	1601.02	64.49	1435.11	6703.61	7581.61	1524.14
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1555.69	6743.25	7626.43	1623.43	64.90	1459.58	6743.25	7626.43	1546.54
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1580.31	6782.83	7671.20	1645.95	65.31	1484.20	6782.83	7671.20	1569.07
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1605.09	6822.36	7715.90	1668.60	65.72	1508.98	6822.36	7715.90	1591.72
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1630.02	6861.83	7760.55	1691.37	66.13	1533.91	6861.83	7760.55	1614.49
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1655.10	6901.26	7805.14	1714.27	66.54	1559.00	6901.26	7805.14	1637.38
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1680.35	6940.63	7849.66	1737.29	66.95	1584.24	6940.63	7849.66	1660.41
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1705.74	6979.94	7894.13	1760.43	67.36	1609.64	6979.94	7894.13	1683.55
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1731.29	7019.21	7938.54	1783.70	67.77	1635.19	7019.21	7938.54	1706.82
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1757.00	7058.42	7982.88	1807.09	68.18	1660.89	7058.42	7982.88	1730.21
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.15	1778.92	4371.03	4943.52	1827.46	58.15	1682.81	4371.03	4943.52	1750.57
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.50	1800.97	4394.94	4970.56	1847.93	58.50	1704.87	4394.94	4970.56	1771.05
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	58.85	1823.16	4418.82	4997.57	1868.51	58.85	1727.05	4418.82	4997.57	1791.62
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.20	1845.48	4442.66	5024.53	1889.19	59.20	1749.37	4442.66	5024.53	1812.30
16.7	14.7	12	0.70	0.50	0.73	33.10	27.35	415.6	59.55	1867.93	4466.47	5051.46	1909.97	59.55	1771.82	4466.47	5051.46	1833.09
16.8	14.8	12	0.70	0.50	0.73	33.10	27.33	418.5	59.89	1890.50	4490.24	5078.34	1930.86	59.89	1794.40	4490.24	5078.34	1853.98
16.9	14.9	12	0.70	0.50	0.73	33.10	27.32	421.3	60.24	1913.22	4513.97	5105.18	1951.86	60.24	1817.11	4513.97	5105.18	1874.98
17.0	15.0	12	0.70	0.50	0.73	33.10	27.31	424.1	60.59	1936.06	4537.67	5131.98	1972.96	60.59	1839.95	4537.67	5131.98	1896.08

1.2.5.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1585	1521

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	2.0	10.45	3.28	737.02	578.85	4.59	10.45	3.28	737.02	578.85	4.59
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	3.9	10.78	6.67	760.58	597.36	9.26	10.78	6.67	760.58	597.36	9.26
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	5.9	11.12	10.16	784.14	615.86	14.02	11.12	10.16	784.14	615.86	14.02
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	7.9	11.45	13.76	807.70	634.36	18.86	11.45	13.76	807.70	634.36	18.86
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	9.8	11.78	17.46	831.26	652.87	23.79	11.78	17.46	831.26	652.87	23.79
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	11.8	12.12	21.27	854.82	671.37	28.80	12.12	21.27	854.82	671.37	28.80
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	13.7	12.45	25.18	878.38	689.88	33.89	12.45	25.18	878.38	689.88	33.89
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	15.7	12.79	29.20	901.94	708.38	39.07	12.79	29.20	901.94	708.38	39.07
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	17.7	13.12	33.32	925.50	726.88	44.33	13.12	33.32	925.50	726.88	44.33
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	19.6	13.45	37.55	949.06	745.39	49.67	13.45	37.55	949.06	745.39	49.67
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	21.6	13.79	41.88	972.62	763.89	55.10	13.79	41.88	972.62	763.89	55.10
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	23.6	14.12	46.32	996.18	782.40	60.61	14.12	46.32	996.18	782.40	60.61
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	25.5	14.46	50.86	1019.74	800.90	66.21	14.46	50.86	1019.74	800.90	66.21
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	27.5	14.76	55.49	1037.26	814.66	71.88	14.76	55.49	1037.26	814.66	71.88
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	29.5	15.10	60.24	1060.68	833.06	77.64	15.10	60.24	1060.68	833.06	77.64
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	31.4	15.43	65.08	1084.11	851.45	83.48	15.43	65.08	1084.11	851.45	83.48
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	33.4	15.76	70.04	1107.53	869.85	89.41	15.76	70.04	1107.53	869.85	89.41
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	35.3	16.10	75.09	1130.95	888.25	95.42	16.10	75.09	1130.95	888.25	95.42
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	37.3	16.43	80.26	1154.38	906.64	101.51	16.43	80.26	1154.38	906.64	101.51
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	39.3	16.76	85.52	1177.80	925.04	107.69	16.76	85.52	1177.80	925.04	107.69
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	41.2	17.10	90.89	1201.22	943.44	113.95	17.10	90.89	1201.22	943.44	113.95
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	43.2	17.43	96.37	1224.65	961.83	120.29	17.43	96.37	1224.65	961.83	120.29

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	45.2	17.76	101.95	1248.07	980.23	126.72	17.76	101.95	1248.07	980.23	126.72
4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	47.1	18.10	107.63	1271.49	998.63	133.23	18.10	107.63	1271.49	998.63	133.23
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	49.1	19.80	113.85	356.97	280.37	140.17	10.63	110.98	187.77	147.48	137.87
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	51.1	19.80	120.08	358.81	281.81	147.11	10.81	114.37	190.81	149.86	142.55
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	53.0	19.80	126.30	360.64	283.25	154.05	10.98	117.82	193.85	152.25	147.27
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	55.0	19.80	132.52	362.47	284.68	160.99	11.15	121.32	196.89	154.64	152.04
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	56.9	19.80	138.74	364.31	286.12	167.93	11.32	124.88	199.93	157.02	156.84
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	58.9	19.80	144.96	366.14	287.56	174.87	11.49	128.49	202.97	159.41	161.70
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	60.9	19.80	151.18	367.97	289.00	181.81	11.67	132.15	206.01	161.80	166.59
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	62.8	19.80	157.40	369.80	290.44	188.75	11.84	135.87	209.05	164.19	171.53
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	64.8	20.81	163.94	1462.27	1148.46	195.94	20.81	142.41	1462.27	1148.46	178.72
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	66.8	21.15	170.58	1485.69	1166.86	203.22	21.15	149.06	1485.69	1166.86	186.00
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	68.7	21.48	177.33	1509.11	1185.26	210.58	21.48	155.80	1509.11	1185.26	193.36
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	70.7	21.81	184.18	1532.54	1203.65	218.03	21.81	162.66	1532.54	1203.65	200.81
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	72.6	22.15	191.14	1555.96	1222.05	225.56	22.15	169.61	1555.96	1222.05	208.34
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	74.6	22.48	198.20	1579.38	1240.45	233.17	22.48	176.67	1579.38	1240.45	215.95
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	76.6	22.81	205.36	1602.81	1258.84	240.87	22.81	183.84	1602.81	1258.84	223.65
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	211.59	385.18	302.52	247.81	13.36	188.04	235.91	185.28	228.97
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	217.81	387.02	303.96	254.75	13.53	192.29	238.95	187.67	234.33
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	224.03	388.85	305.40	261.69	13.70	196.59	241.99	190.06	239.74
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	230.25	390.68	306.84	268.63	13.88	200.95	245.03	192.44	245.19
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	236.47	392.51	308.28	275.57	14.05	205.37	248.07	194.83	250.69
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	242.69	394.35	309.72	282.51	14.22	209.83	251.10	197.22	256.22
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	248.91	396.18	311.16	289.45	14.39	214.36	254.14	199.60	261.81
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	255.13	398.01	312.60	296.39	14.56	218.93	257.18	201.99	267.43
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	261.35	399.85	314.04	303.33	14.74	223.56	260.22	204.38	273.10
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	267.57	401.68	315.48	310.27	14.91	228.24	263.26	206.77	278.81
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	273.79	403.51	316.92	317.21	15.08	232.98	266.30	209.15	284.56
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	280.01	405.35	318.36	324.15	15.25	237.77	269.34	211.54	290.36
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	286.23	407.18	319.80	331.09	15.42	242.62	272.38	213.93	296.20
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	292.45	409.01	321.24	338.03	15.60	247.52	275.42	216.31	302.08
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	298.67	410.84	322.68	344.96	15.77	252.47	278.46	218.70	308.01
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	304.89	412.68	324.12	351.90	15.94	257.48	281.50	221.09	313.98
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	311.11	414.51	325.56	358.84	16.11	262.54	284.54	223.47	319.99
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	317.33	416.34	327.00	365.78	16.29	267.66	287.58	225.86	326.05
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	323.55	418.18	328.43	372.72	16.46	272.83	290.62	228.25	332.15
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	329.77	420.01	329.87	379.66	16.63	278.06	293.65	230.64	338.29
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	335.99	421.84	331.31	386.60	16.80	283.33	296.69	233.02	344.48
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	342.21	423.68	332.75	393.54	16.97	288.67	299.73	235.41	350.71
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	348.43	425.51	334.19	400.48	17.15	294.05	302.77	237.80	356.98
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	354.65	427.34	335.63	407.42	17.32	299.49	305.81	240.18	363.29
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	360.87	429.17	337.07	414.36	17.49	304.99	308.85	242.57	369.65
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	367.09	431.01	338.51	421.30	17.66	310.54	311.89	244.96	376.06
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	373.31	432.84	339.95	428.24	17.83	316.14	314.93	247.35	382.50
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	379.53	434.67	341.39	435.18	18.01	321.80	317.97	249.73	388.99
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	385.76	436.51	342.83	442.12	18.18	327.51	321.01	252.12	395.52
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	391.98	438.34	344.27	449.06	18.35	333.27	324.05	254.51	402.10

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	398.20	440.17	345.71	456.00	18.52	339.09	327.09	256.89	408.72
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	404.42	442.01	347.15	462.94	18.70	344.97	330.13	259.28	415.38
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	410.64	443.84	348.59	469.88	18.87	350.89	333.17	261.67	422.09
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	416.86	445.67	350.03	476.82	19.04	356.87	336.20	264.05	428.83
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	423.08	447.50	351.47	483.76	19.21	362.91	339.24	266.44	435.63
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	429.30	449.34	352.91	490.70	19.38	369.00	342.28	268.83	442.46
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	435.52	451.17	354.35	497.64	19.56	375.14	345.32	271.22	449.34
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	441.74	453.00	355.79	504.58	19.73	381.34	348.36	273.60	456.26
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	153.2	39.08	454.02	3542.49	2782.26	516.36	39.08	393.62	3542.49	2782.26	468.05
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	155.1	39.46	466.41	3576.76	2809.18	528.24	39.46	406.01	3576.76	2809.18	479.93
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	157.1	39.83	478.93	3611.03	2836.10	540.22	39.83	418.53	3611.03	2836.10	491.90
10.1	8.1	6	0.70	0.50	0.79	35.40	35.91	159.0	40.21	491.56	3643.61	2861.69	552.29	40.21	431.16	3643.61	2861.69	503.97
10.2	8.2	6	0.70	0.50	0.79	35.40	35.89	161.0	40.59	504.31	3676.15	2887.24	564.46	40.59	443.91	3676.15	2887.24	516.14
10.3	8.3	6	0.70	0.50	0.79	35.40	35.87	163.0	40.97	517.18	3708.65	2912.77	576.72	40.97	456.78	3708.65	2912.77	528.40
10.4	8.4	6	0.70	0.50	0.79	35.40	35.86	164.9	41.35	530.17	3741.11	2938.26	589.07	41.35	469.77	3741.11	2938.26	540.75
10.5	8.5	6	0.70	0.50	0.79	35.40	35.84	166.9	41.73	543.28	3773.52	2963.72	601.52	41.73	482.88	3773.52	2963.72	553.20
10.6	8.6	7	0.35	0.50	0.40	19.00	3.55	168.9	28.00	552.08	920.32	722.81	610.52	21.44	489.62	377.07	296.15	560.55
10.7	8.7	7	0.35	0.50	0.40	19.00	3.55	170.8	28.00	560.87	922.15	724.25	619.52	21.61	496.41	379.83	298.32	567.95
10.8	8.8	7	0.35	0.50	0.40	19.00	3.55	172.8	28.00	569.67	923.98	725.69	628.52	21.79	503.25	382.58	300.48	575.39
10.9	8.9	7	0.35	0.50	0.40	19.00	3.55	174.8	28.00	578.47	925.82	727.13	637.52	21.96	510.15	385.34	302.64	582.87
11.0	9.0	7	0.35	0.50	0.40	19.00	3.54	176.7	28.00	587.26	927.65	728.57	646.52	22.13	517.10	388.08	304.80	590.40
11.1	9.1	7	0.35	0.50	0.40	19.00	3.54	178.7	28.00	596.06	929.48	730.01	655.52	22.30	524.11	390.82	306.95	597.97
11.2	9.2	7	0.35	0.50	0.40	19.00	3.54	180.6	28.00	604.85	931.31	731.45	664.53	22.47	531.17	393.56	309.10	605.58
11.3	9.3	7	0.35	0.50	0.40	19.00	3.54	182.6	28.00	613.65	933.15	732.89	673.53	22.65	538.28	396.29	311.24	613.23
11.4	9.4	7	0.35	0.50	0.40	19.00	3.53	184.6	28.00	622.45	934.98	734.33	682.53	22.82	545.45	399.01	313.38	620.93
11.5	9.5	7	0.35	0.50	0.40	19.00	3.53	186.5	28.00	631.24	936.81	735.77	691.53	22.99	552.68	401.73	315.52	628.67
11.6	9.6	7	0.35	0.50	0.40	19.00	3.53	188.5	28.00	640.04	938.65	737.21	700.53	23.16	559.95	404.45	317.65	636.46
11.7	9.7	8	0.70	0.50	0.73	33.10	27.75	190.5	42.15	653.28	3208.79	2520.17	713.09	42.15	573.20	3208.79	2520.17	649.02
11.8	9.8	8	0.70	0.50	0.73	33.10	27.74	192.4	42.50	666.64	3233.52	2539.60	725.73	42.50	586.55	3233.52	2539.60	661.66
11.9	9.9	8	0.70	0.50	0.73	33.10	27.72	194.4	42.85	680.10	3258.22	2559.00	738.46	42.85	600.01	3258.22	2559.00	674.39
12.0	10.0	9	0.70	0.50	0.90	38.85	50.27	196.3	53.06	696.77	5955.66	4677.57	753.76	53.06	616.68	5955.66	4677.57	689.69
12.1	10.1	9	0.70	0.50	0.90	38.85	50.24	198.3	53.49	713.57	6000.67	4712.92	769.17	53.49	633.48	6000.67	4712.92	705.10
12.2	10.2	9	0.70	0.50	0.90	38.85	50.22	200.3	53.91	730.51	6045.61	4748.21	784.68	53.91	650.42	6045.61	4748.21	720.61
12.3	10.3	9	0.70	0.50	0.90	38.85	50.19	202.2	54.34	747.58	6090.49	4783.46	800.30	54.34	667.49	6090.49	4783.46	736.23
12.4	10.4	9	0.70	0.50	0.90	38.85	50.17	204.2	54.77	764.78	6135.30	4818.66	816.03	54.77	684.69	6135.30	4818.66	751.96
12.5	10.5	9	0.70	0.50	0.90	38.85	50.14	206.2	55.19	782.12	6180.05	4853.80	831.86	55.19	702.03	6180.05	4853.80	767.79
12.6	10.6	9	0.70	0.50	0.90	38.85	50.12	208.1	55.62	799.60	6224.73	4888.89	847.81	55.62	719.51	6224.73	4888.89	783.74
12.7	10.7	9	0.70	0.50	0.90	38.85	50.09	210.1	56.05	817.20	6269.34	4923.93	863.86	56.05	737.12	6269.34	4923.93	799.79
12.8	10.8	9	0.70	0.50	0.90	38.85	50.07	212.1	56.48	834.95	6313.89	4958.91	880.02	56.48	754.86	6313.89	4958.91	815.94
12.9	10.9	9	0.70	0.50	0.90	38.85	50.04	214.0	56.90	852.82	6358.36	4993.85	896.28	56.90	772.74	6358.36	4993.85	832.21
13.0	11.0	9	0.70	0.50	0.90	38.85	50.02	216.0	57.33	870.83	6402.77	5028.73	912.65	57.33	790.75	6402.77	5028.73	848.58
13.1	11.1	9	0.70	0.50	0.90	38.85	49.99	217.9	57.76	888.98	6447.11	5063.55	929.13	57.76	808.89	6447.11	5063.55	865.06
13.2	11.2	9	0.70	0.50	0.90	38.85	49.96	219.9	58.18	907.26	6491.39	5098.32	945.72	58.18	827.17	6491.39	5098.32	881.65
13.3	11.3	9	0.70	0.50	0.90	38.85	49.94	221.9	58.61	925.67	6535.59	5133.04	962.41	58.61	845.58	6535.59	5133.04	898.34
13.4	11.4	9	0.70	0.50	0.90	38.85	49.91	223.8	59.04	944.22	6579.72	5167.70	979.21	59.04	864.13	6579.72	5167.70	915.14
13.5	11.5	10	0.70	0.50	0.73	33.10	27.47	225.8	48.41	959.43	3648.11	2865.22	993.35	48.41	879.34	3648.11	2865.22	929.28
13.6	11.6	10	0.70	0.50	0.73	33.10	27.46	227.8	48.76	974.75	3672.13	2884.08	1007.56	48.76	894.66	3672.13	2884.08	943.49

13.7	11.7	10	0.70	0.50	0.73	33.10	27.44	229.7	49.11	990.18	3696.11	2902.92	1021.87	49.11	910.09	3696.11	2902.92	957.80
13.8	11.8	10	0.70	0.50	0.73	33.10	27.42	231.7	49.46	1005.72	3720.05	2921.72	1036.26	49.46	925.63	3720.05	2921.72	972.19
13.9	11.9	10	0.70	0.50	0.73	33.10	27.41	233.7	49.81	1021.36	3743.95	2940.49	1050.75	49.81	941.27	3743.95	2940.49	986.68
14.0	12.0	10	0.70	0.50	0.73	33.10	27.39	235.6	50.15	1037.12	3767.80	2959.22	1065.31	50.15	957.03	3767.80	2959.22	1001.24
14.1	12.1	10	0.70	0.50	0.73	33.10	27.37	237.6	50.50	1052.98	3791.61	2977.92	1079.97	50.50	972.90	3791.61	2977.92	1015.90
14.2	12.2	10	0.70	0.50	0.73	33.10	27.36	239.5	50.85	1068.96	3815.37	2996.59	1094.71	50.85	988.87	3815.37	2996.59	1030.64
14.3	12.3	10	0.70	0.50	0.73	33.10	27.34	241.5	51.20	1085.04	3839.10	3015.22	1109.54	51.20	1004.96	3839.10	3015.22	1045.47
14.4	12.4	10	0.70	0.50	0.73	33.10	27.32	243.5	51.55	1101.24	3862.78	3033.82	1124.46	51.55	1021.15	3862.78	3033.82	1060.39
14.5	12.5	10	0.70	0.50	0.73	33.10	27.31	245.4	51.89	1117.54	3886.41	3052.38	1139.47	51.89	1037.45	3886.41	3052.38	1075.40
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	1136.90	6350.93	4988.01	1156.92	61.62	1056.81	6350.93	4988.01	1092.85
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	1156.39	6389.47	5018.28	1174.47	62.03	1076.30	6389.47	5018.28	1110.40
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	1176.00	6427.93	5048.49	1192.13	62.44	1095.91	6427.93	5048.49	1128.06
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	1195.75	6466.33	5078.64	1209.89	62.85	1115.66	6466.33	5078.64	1145.82
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	1215.62	6504.65	5108.74	1227.75	63.26	1135.53	6504.65	5108.74	1163.68
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	1235.62	6542.91	5138.79	1245.72	63.67	1155.54	6542.91	5138.79	1181.65
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	1255.76	6581.09	5168.78	1263.79	64.08	1175.67	6581.09	5168.78	1199.72
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	1276.02	6619.20	5198.71	1281.96	64.49	1195.93	6619.20	5198.71	1217.89
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	1296.41	6657.24	5228.58	1300.23	64.90	1216.32	6657.24	5228.58	1236.16
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	1316.92	6695.20	5258.40	1318.61	65.31	1236.84	6695.20	5258.40	1254.54
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	1337.57	6733.10	5288.16	1337.09	65.72	1257.48	6733.10	5288.16	1273.02
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	1358.35	6770.92	5317.87	1355.68	66.13	1278.26	6770.92	5317.87	1291.61
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1379.25	6808.66	5347.51	1374.37	66.54	1299.17	6808.66	5347.51	1310.29
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1400.29	6846.33	5377.10	1393.16	66.95	1320.20	6846.33	5377.10	1329.09
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1421.45	6883.93	5406.63	1412.05	67.36	1341.36	6883.93	5406.63	1347.98
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1442.74	6921.45	5436.10	1431.05	67.77	1362.65	6921.45	5436.10	1366.98
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1464.16	6958.90	5465.51	1450.15	68.18	1384.08	6958.90	5465.51	1386.08
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.15	1482.43	4303.98	3380.34	1466.73	58.15	1402.35	4303.98	3380.34	1402.66
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.50	1500.81	4326.73	3398.21	1483.39	58.50	1420.72	4326.73	3398.21	1419.32
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	58.85	1519.30	4349.43	3416.03	1500.15	58.85	1439.21	4349.43	3416.03	1436.08
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.20	1537.90	4372.07	3433.82	1516.99	59.20	1457.81	4372.07	3433.82	1452.92
16.7	14.7	12	0.70	0.50	0.73	33.10	26.91	288.6	59.55	1556.60	4394.67	3451.56	1533.92	59.55	1476.52	4394.67	3451.56	1469.85
16.8	14.8	12	0.70	0.50	0.73	33.10	26.89	290.6	59.89	1575.42	4417.21	3469.27	1550.93	59.89	1495.33	4417.21	3469.27	1486.86
16.9	14.9	12	0.70	0.50	0.73	33.10	26.87	292.6	60.24	1594.35	4439.71	3486.94	1568.04	60.24	1514.26	4439.71	3486.94	1503.97
17.0	15.0	12	0.70	0.50	0.73	33.10	26.85	294.5	60.59	1613.38	4462.15	3504.57	1585.23	60.59	1533.29	4462.15	3504.57	1521.16

1.2.5.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
$\xi_{.}$	1.475	
$\xi_{.}$	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1221	1170

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.70	32.00	24.70	1.3	10.45	2.63	737.02	370.47	3.36	10.45	2.63	737.02	370.47	3.36
2.2	0.2	1	0.70	0.50	0.70	32.00	24.70	2.5	10.78	5.34	760.58	382.31	6.78	10.78	5.34	760.58	382.31	6.78
2.3	0.3	1	0.70	0.50	0.70	32.00	24.70	3.8	11.12	8.13	784.14	394.15	10.27	11.12	8.13	784.14	394.15	10.27
2.4	0.4	1	0.70	0.50	0.70	32.00	24.70	5.0	11.45	11.01	807.70	405.99	13.83	11.45	11.01	807.70	405.99	13.83
2.5	0.5	1	0.70	0.50	0.70	32.00	24.70	6.3	11.78	13.97	831.26	417.84	17.46	11.78	13.97	831.26	417.84	17.46
2.6	0.6	1	0.70	0.50	0.70	32.00	24.70	7.5	12.12	17.02	854.82	429.68	21.15	12.12	17.02	854.82	429.68	21.15
2.7	0.7	1	0.70	0.50	0.70	32.00	24.70	8.8	12.45	20.14	878.38	441.52	24.91	12.45	20.14	878.38	441.52	24.91
2.8	0.8	1	0.70	0.50	0.70	32.00	24.70	10.1	12.79	23.36	901.94	453.36	28.74	12.79	23.36	901.94	453.36	28.74
2.9	0.9	1	0.70	0.50	0.70	32.00	24.70	11.3	13.12	26.66	925.50	465.21	32.63	13.12	26.66	925.50	465.21	32.63
3.0	1.0	1	0.70	0.50	0.70	32.00	24.70	12.6	13.45	30.04	949.06	477.05	36.60	13.45	30.04	949.06	477.05	36.60
3.1	1.1	1	0.70	0.50	0.70	32.00	24.70	13.8	13.79	33.50	972.62	488.89	40.63	13.79	33.50	972.62	488.89	40.63
3.2	1.2	1	0.70	0.50	0.70	32.00	24.70	15.1	14.12	37.05	996.18	500.73	44.72	14.12	37.05	996.18	500.73	44.72
3.3	1.3	1	0.70	0.50	0.70	32.00	24.70	16.3	14.46	40.69	1019.74	512.58	48.88	14.46	40.69	1019.74	512.58	48.88
3.4	1.4	2	0.70	0.50	0.70	31.95	24.55	17.6	14.76	44.40	1037.26	521.38	53.11	14.76	44.40	1037.26	521.38	53.11
3.5	1.5	2	0.70	0.50	0.70	31.95	24.55	18.8	15.10	48.19	1060.68	533.16	57.40	15.10	48.19	1060.68	533.16	57.40
3.6	1.6	2	0.70	0.50	0.70	31.95	24.55	20.1	15.43	52.07	1084.11	544.93	61.76	15.43	52.07	1084.11	544.93	61.76
3.7	1.7	2	0.70	0.50	0.70	31.95	24.55	21.4	15.76	56.03	1107.53	556.70	66.19	15.76	56.03	1107.53	556.70	66.19
3.8	1.8	2	0.70	0.50	0.70	31.95	24.55	22.6	16.10	60.08	1130.95	568.48	70.68	16.10	60.08	1130.95	568.48	70.68
3.9	1.9	2	0.70	0.50	0.70	31.95	24.55	23.9	16.43	64.20	1154.38	580.25	75.24	16.43	64.20	1154.38	580.25	75.24
4.0	2.0	2	0.70	0.50	0.70	31.95	24.55	25.1	16.76	68.42	1177.80	592.03	79.87	16.76	68.42	1177.80	592.03	79.87
4.1	2.1	2	0.70	0.50	0.70	31.95	24.55	26.4	17.10	72.71	1201.22	603.80	84.56	17.10	72.71	1201.22	603.80	84.56
4.2	2.2	2	0.70	0.50	0.70	31.95	24.55	27.6	17.43	77.10	1224.65	615.57	89.32	17.43	77.10	1224.65	615.57	89.32

Breve termine

Lungo termine

Palo

4.3	2.3	2	0.70	0.50	0.70	31.95	24.55	28.9	17.76	81.56	1248.07	627.35	94.15	17.76	81.56	1248.07	627.35	94.15
4.4	2.4	2	0.70	0.50	0.70	31.95	24.55	30.2	18.10	86.11	1271.49	639.12	99.05	18.10	86.11	1271.49	639.12	99.05
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	31.4	19.80	91.08	356.97	179.43	104.28	10.63	88.78	187.77	94.38	102.44
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	32.7	19.80	96.06	358.81	180.36	109.52	10.81	91.50	190.81	95.91	105.87
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	33.9	19.80	101.04	360.64	181.28	114.76	10.98	94.25	193.85	97.44	109.33
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	35.2	19.80	106.01	362.47	182.20	120.00	11.15	97.06	196.89	98.97	112.83
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	36.4	19.80	110.99	364.31	183.12	125.23	11.32	99.90	199.93	100.50	116.36
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	37.7	19.80	115.97	366.14	184.04	130.47	11.49	102.79	202.97	102.02	119.93
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	39.0	19.80	120.94	367.97	184.96	135.71	11.67	105.72	206.01	103.55	123.53
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	40.2	19.80	125.92	369.80	185.88	140.95	11.84	108.70	209.05	105.08	127.17
5.3	3.3	4	0.70	0.50	0.70	31.95	24.55	41.5	20.81	131.15	1462.27	735.02	146.39	20.81	113.93	1462.27	735.02	132.61
5.4	3.4	4	0.70	0.50	0.70	31.95	24.55	42.7	21.15	136.46	1485.69	746.79	151.90	21.15	119.24	1485.69	746.79	138.12
5.5	3.5	4	0.70	0.50	0.70	31.95	24.55	44.0	21.48	141.86	1509.11	758.56	157.47	21.48	124.64	1509.11	758.56	143.70
5.6	3.6	4	0.70	0.50	0.70	31.95	24.55	45.2	21.81	147.34	1532.54	770.34	163.11	21.81	130.12	1532.54	770.34	149.34
5.7	3.7	4	0.70	0.50	0.70	31.95	24.55	46.5	22.15	152.91	1555.96	782.11	168.82	22.15	135.69	1555.96	782.11	155.05
5.8	3.8	4	0.70	0.50	0.70	31.95	24.55	47.8	22.48	158.56	1579.38	793.89	174.60	22.48	141.34	1579.38	793.89	160.82
5.9	3.9	4	0.70	0.50	0.70	31.95	24.55	49.0	22.81	164.29	1602.81	805.66	180.44	22.81	147.07	1602.81	805.66	166.67
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	169.27	385.18	193.61	185.68	13.36	150.43	235.91	118.58	170.61
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	174.24	387.02	194.53	190.92	13.53	153.83	238.95	120.11	174.59
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	179.22	388.85	195.46	196.16	13.70	157.28	241.99	121.64	178.60
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	184.20	390.68	196.38	201.39	13.88	160.76	245.03	123.16	182.65
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	189.17	392.51	197.30	206.63	14.05	164.29	248.07	124.69	186.73
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	194.15	394.35	198.22	211.87	14.22	167.87	251.10	126.22	190.84
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	199.13	396.18	199.14	217.11	14.39	171.48	254.14	127.75	194.99
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	204.10	398.01	200.06	222.34	14.56	175.15	257.18	129.27	199.18
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	209.08	399.85	200.98	227.58	14.74	178.85	260.22	130.80	203.40
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	214.05	401.68	201.91	232.82	14.91	182.60	263.26	132.33	207.65
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	219.03	403.51	202.83	238.06	15.08	186.39	266.30	133.86	211.94
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	224.01	405.35	203.75	243.29	15.25	190.22	269.34	135.39	216.26
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	228.98	407.18	204.67	248.53	15.42	194.10	272.38	136.91	220.62
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	233.96	409.01	205.59	253.77	15.60	198.02	275.42	138.44	225.01
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	238.94	410.84	206.51	259.01	15.77	201.98	278.46	139.97	229.44
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	243.91	412.68	207.43	264.25	15.94	205.99	281.50	141.50	233.90
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	248.89	414.51	208.36	269.48	16.11	210.04	284.54	143.02	238.40
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	253.87	416.34	209.28	274.72	16.29	214.13	287.58	144.55	242.93
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	258.84	418.18	210.20	279.96	16.46	218.26	290.62	146.08	247.50
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	263.82	420.01	211.12	285.20	16.63	222.44	293.65	147.61	252.10
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	268.79	421.84	212.04	290.43	16.80	226.67	296.69	149.13	256.73
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	273.77	423.68	212.96	295.67	16.97	230.93	299.73	150.66	261.40
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	278.75	425.51	213.88	300.91	17.15	235.24	302.77	152.19	266.11
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	283.72	427.34	214.81	306.15	17.32	239.59	305.81	153.72	270.84
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	288.70	429.17	215.73	311.38	17.49	243.99	308.85	155.25	275.62
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	293.68	431.01	216.65	316.62	17.66	248.43	311.62	156.64	280.43
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	298.65	432.84	217.57	321.86	17.83	252.91	314.39	158.03	285.27
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	303.63	434.67	218.49	327.10	18.01	257.44	317.15	159.42	290.14
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	308.60	436.51	219.41	332.33	18.18	262.01	319.91	160.80	295.06
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	313.58	438.34	220.33	337.57	18.35	266.62	322.66	162.18	300.00

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	318.56	440.17	221.25	342.81	18.52	271.27	325.40	163.56	304.98
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	323.53	442.01	222.18	348.05	18.70	275.97	328.13	164.94	310.00
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	328.51	443.84	223.10	353.29	18.87	280.71	330.86	166.31	315.05
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	333.49	445.67	224.02	358.52	19.04	285.50	333.58	167.68	320.13
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	338.46	447.50	224.94	363.76	19.21	290.33	336.30	169.04	325.25
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	343.44	449.34	225.86	369.00	19.38	295.20	339.01	170.40	330.41
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	348.41	451.17	226.78	374.24	19.56	300.11	341.71	171.76	335.60
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	353.39	453.00	227.70	379.47	19.73	305.07	344.40	173.12	340.82
9.8	7.8	6	0.70	0.50	0.79	35.40	35.62	98.0	39.08	363.21	3512.36	1765.51	388.59	39.08	314.89	3512.36	1765.51	349.93
9.9	7.9	6	0.70	0.50	0.79	35.40	35.60	99.3	39.46	373.13	3544.05	1781.44	397.78	39.46	324.81	3544.05	1781.44	359.12
10.0	8.0	6	0.70	0.50	0.79	35.40	35.57	100.5	39.83	383.14	3575.68	1797.34	407.04	39.83	334.82	3575.68	1797.34	368.39
10.1	8.1	6	0.70	0.50	0.79	35.40	35.55	101.8	40.21	393.25	3607.26	1813.20	416.39	40.21	344.93	3607.26	1813.20	377.73
10.2	8.2	6	0.70	0.50	0.79	35.40	35.53	103.0	40.59	403.45	3638.77	1829.04	425.80	40.59	355.13	3638.77	1829.04	387.15
10.3	8.3	6	0.70	0.50	0.79	35.40	35.50	104.3	40.97	413.75	3670.22	1844.85	435.30	40.97	365.43	3670.22	1844.85	396.64
10.4	8.4	6	0.70	0.50	0.79	35.40	35.48	105.6	41.35	424.14	3701.61	1860.63	444.87	41.35	375.82	3701.61	1860.63	406.21
10.5	8.5	6	0.70	0.50	0.79	35.40	35.45	106.8	41.73	434.62	3732.93	1876.38	454.51	41.73	386.31	3732.93	1876.38	415.86
10.6	8.6	7	0.35	0.50	0.40	19.00	3.50	108.1	28.00	441.66	920.32	462.60	461.40	21.44	391.69	371.20	186.59	421.43
10.7	8.7	7	0.35	0.50	0.40	19.00	3.49	109.3	28.00	448.70	922.15	463.52	468.29	21.61	397.13	373.82	187.90	427.03
10.8	8.8	7	0.35	0.50	0.40	19.00	3.49	110.6	28.00	455.74	923.98	464.44	475.17	21.79	402.60	376.44	189.22	432.67
10.9	8.9	7	0.35	0.50	0.40	19.00	3.49	111.8	28.00	462.77	925.82	465.37	482.06	21.96	408.12	379.04	190.53	438.34
11.0	9.0	7	0.35	0.50	0.40	19.00	3.48	113.1	28.00	469.81	927.65	466.29	488.94	22.13	413.68	381.64	191.84	444.04
11.1	9.1	7	0.35	0.50	0.40	19.00	3.48	114.4	28.00	476.85	929.48	467.21	495.83	22.30	419.29	384.24	193.14	449.78
11.2	9.2	7	0.35	0.50	0.40	19.00	3.48	115.6	28.00	483.88	931.31	468.13	502.72	22.47	424.94	386.82	194.44	455.56
11.3	9.3	7	0.35	0.50	0.40	19.00	3.47	116.9	28.00	490.92	933.15	469.05	509.60	22.65	430.63	389.40	195.73	461.37
11.4	9.4	7	0.35	0.50	0.40	19.00	3.47	118.1	28.00	497.96	934.98	469.97	516.49	22.82	436.36	391.97	197.03	467.21
11.5	9.5	7	0.35	0.50	0.40	19.00	3.47	119.4	28.00	505.00	936.81	470.89	523.38	22.99	442.14	394.53	198.31	473.09
11.6	9.6	7	0.35	0.50	0.40	19.00	3.46	120.6	28.00	512.03	938.65	471.81	530.26	23.16	447.96	397.09	199.60	479.01
11.7	9.7	8	0.70	0.50	0.73	33.10	27.37	121.9	42.15	522.63	3164.36	1590.58	540.00	42.15	458.56	3164.36	1590.58	488.74
11.8	9.8	8	0.70	0.50	0.73	33.10	27.35	123.2	42.50	533.31	3188.01	1602.47	549.80	42.50	469.24	3188.01	1602.47	498.54
11.9	9.9	8	0.70	0.50	0.73	33.10	27.33	124.4	42.85	544.08	3211.61	1614.33	559.67	42.85	480.01	3211.61	1614.33	508.41
12.0	10.0	9	0.70	0.50	0.90	38.85	49.61	125.7	53.06	557.41	5877.27	2954.24	571.59	53.06	493.34	5877.27	2954.24	520.34
12.1	10.1	9	0.70	0.50	0.90	38.85	49.57	126.9	53.49	570.85	5920.35	2975.89	583.60	53.49	506.78	5920.35	2975.89	532.35
12.2	10.2	9	0.70	0.50	0.90	38.85	49.54	128.2	53.91	584.40	5963.33	2997.50	595.70	53.91	520.33	5963.33	2997.50	544.44
12.3	10.3	9	0.70	0.50	0.90	38.85	49.50	129.4	54.34	598.06	6006.22	3019.05	607.88	54.34	533.99	6006.22	3019.05	556.63
12.4	10.4	9	0.70	0.50	0.90	38.85	49.46	130.7	54.77	611.83	6049.00	3040.56	620.15	54.77	547.76	6049.00	3040.56	568.89
12.5	10.5	9	0.70	0.50	0.90	38.85	49.43	131.9	55.19	625.70	6091.69	3062.02	632.51	55.19	561.63	6091.69	3062.02	581.25
12.6	10.6	9	0.70	0.50	0.90	38.85	49.39	133.2	55.62	639.68	6134.28	3083.42	644.95	55.62	575.61	6134.28	3083.42	593.69
12.7	10.7	9	0.70	0.50	0.90	38.85	49.35	134.5	56.05	653.76	6176.77	3104.78	657.47	56.05	589.69	6176.77	3104.78	606.21
12.8	10.8	9	0.70	0.50	0.90	38.85	49.32	135.7	56.48	667.96	6219.15	3126.09	670.08	56.48	603.89	6219.15	3126.09	618.83
12.9	10.9	9	0.70	0.50	0.90	38.85	49.28	137.0	56.90	682.26	6261.44	3147.34	682.78	56.90	618.19	6261.44	3147.34	631.52
13.0	11.0	9	0.70	0.50	0.90	38.85	49.24	138.2	57.33	696.67	6303.62	3168.54	695.56	57.33	632.60	6303.62	3168.54	644.31
13.1	11.1	9	0.70	0.50	0.90	38.85	49.20	139.5	57.76	711.18	6345.69	3189.69	708.43	57.76	647.11	6345.69	3189.69	657.18
13.2	11.2	9	0.70	0.50	0.90	38.85	49.16	140.7	58.18	725.81	6387.67	3210.79	721.39	58.18	661.74	6387.67	3210.79	670.13
13.3	11.3	9	0.70	0.50	0.90	38.85	49.13	142.0	58.61	740.54	6429.53	3231.84	734.43	58.61	676.47	6429.53	3231.84	683.17
13.4	11.4	9	0.70	0.50	0.90	38.85	49.09	143.3	59.04	755.38	6471.30	3252.83	747.56	59.04	691.31	6471.30	3252.83	696.30
13.5	11.5	10	0.70	0.50	0.73	33.10	26.97	144.5	48.41	767.54	3581.31	1800.16	758.55	48.41	703.47	3581.31	1800.16	707.29
13.6	11.6	10	0.70	0.50	0.73	33.10	26.95	145.8	48.76	779.80	3603.91	1811.52	769.61	48.76	715.73	3603.91	1811.52	718.35

13.7	11.7	10	0.70	0.50	0.73	33.10	26.92	147.0	49.11	792.14	3626.44	1822.85	780.74	49.11	728.07	3626.44	1822.85	729.48
13.8	11.8	10	0.70	0.50	0.73	33.10	26.90	148.3	49.46	804.57	3648.91	1834.14	791.94	49.46	740.50	3648.91	1834.14	740.68
13.9	11.9	10	0.70	0.50	0.73	33.10	26.88	149.5	49.81	817.09	3671.31	1845.40	803.21	49.81	753.02	3671.31	1845.40	751.96
14.0	12.0	10	0.70	0.50	0.73	33.10	26.85	150.8	50.15	829.69	3693.65	1856.63	814.55	50.15	765.62	3693.65	1856.63	763.30
14.1	12.1	10	0.70	0.50	0.73	33.10	26.83	152.1	50.50	842.39	3715.93	1867.83	825.96	50.50	778.32	3715.93	1867.83	774.71
14.2	12.2	10	0.70	0.50	0.73	33.10	26.80	153.3	50.85	855.17	3738.14	1878.99	837.44	50.85	791.10	3738.14	1878.99	786.19
14.3	12.3	10	0.70	0.50	0.73	33.10	26.78	154.6	51.20	868.03	3760.28	1890.12	848.99	51.20	803.96	3760.28	1890.12	797.74
14.4	12.4	10	0.70	0.50	0.73	33.10	26.75	155.8	51.55	880.99	3782.36	1901.22	860.61	51.55	816.92	3782.36	1901.22	809.36
14.5	12.5	10	0.70	0.50	0.73	33.10	26.73	157.1	51.89	894.03	3804.37	1912.29	872.30	51.89	829.96	3804.37	1912.29	821.05
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	909.52	6223.90	3128.47	885.95	61.62	845.45	6223.90	3128.47	834.69
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	925.11	6259.84	3146.54	899.68	62.03	861.04	6259.84	3146.54	848.42
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	940.80	6295.68	3164.55	913.49	62.44	876.73	6295.68	3164.55	862.23
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	956.60	6333.77	3183.70	927.38	62.85	892.53	6333.77	3183.70	876.13
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	972.50	6371.82	3202.83	941.36	63.26	908.43	6371.82	3202.83	890.10
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	988.50	6409.83	3221.93	955.42	63.67	924.43	6409.83	3221.93	904.16
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	1004.60	6447.80	3241.02	969.56	64.08	940.53	6447.80	3241.02	918.30
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	1020.81	6485.73	3260.09	983.78	64.49	956.74	6485.73	3260.09	932.53
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	1037.12	6523.62	3279.13	998.09	64.90	973.05	6523.62	3279.13	946.83
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	1053.54	6561.47	3298.15	1012.48	65.31	989.47	6561.47	3298.15	961.22
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	1070.06	6599.28	3317.16	1026.95	65.72	1005.99	6599.28	3317.16	975.69
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	1086.68	6637.04	3336.14	1041.50	66.13	1022.61	6637.04	3336.14	990.25
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	1103.40	6674.77	3355.10	1056.14	66.54	1039.33	6674.77	3355.10	1004.88
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	1120.23	6712.45	3374.05	1070.86	66.95	1056.16	6712.45	3374.05	1019.60
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	1137.16	6750.09	3392.97	1085.66	67.36	1073.09	6750.09	3392.97	1034.40
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	1154.19	6787.70	3411.87	1100.54	67.77	1090.12	6787.70	3411.87	1049.28
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	1171.33	6825.26	3430.75	1115.51	68.18	1107.26	6825.26	3430.75	1064.25
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.15	1185.95	4219.86	2121.13	1128.46	58.15	1121.88	4219.86	2121.13	1077.20
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.50	1200.65	4242.99	2132.76	1141.48	58.50	1136.58	4242.99	2132.76	1090.22
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	58.85	1215.44	4266.10	2144.38	1154.56	58.85	1151.37	4266.10	2144.38	1103.31
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.20	1230.32	4289.18	2155.98	1167.72	59.20	1166.25	4289.18	2155.98	1116.47
16.7	14.7	12	0.70	0.50	0.73	33.10	26.40	184.7	59.55	1245.28	4312.24	2167.57	1180.95	59.55	1181.21	4312.24	2167.57	1129.70
16.8	14.8	12	0.70	0.50	0.73	33.10	26.39	186.0	59.89	1260.34	4335.28	2179.15	1194.25	59.89	1196.27	4335.28	2179.15	1143.00
16.9	14.9	12	0.70	0.50	0.73	33.10	26.38	187.2	60.24	1275.48	4358.29	2190.71	1207.62	60.24	1211.41	4358.29	2190.71	1156.36
17.0	15.0	12	0.70	0.50	0.73	33.10	26.37	188.5	60.59	1290.70	4381.27	2202.27	1221.06	60.59	1226.63	4381.27	2202.27	1169.80

1.2.5.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ	inserisci stato di addensamento
1	**0.0**	**3.3**	**19.35**			0.70	0.50	0.00	Sciolto
2	**2.5**	**4.4**	**19.35**			0.70	0.50	0.00	Sciolto
3	**4.4**	**5.2**	**18.33**	**22**	**30**	0.66	0.50	0.40	Sciolto
4	**5.2**	**5.9**	**19.35**			0.70	0.50	0.00	Sciolto
5	**5.9**	**9.7**	**18.33**	**22**	**30**	0.66	0.50	0.40	Sciolto
6	**9.7**	**10.5**	**19.35**	**38**		0.70	0.50	0.79	Sciolto
7	**10.5**	**11.6**	**18.33**	**22**	**80**	0.35	0.50	0.40	Sciolto
8	**11.6**	**11.9**	**19.35**			0.70	0.50	0.00	Sciolto
9	**11.9**	**13.4**	**19.35**	**42**		0.70	0.50	0.90	Sciolto
10	**13.4**	**14.5**	**19.35**			0.70	0.50	0.00	Sciolto
11	**14.5**	**16.2**	**19.35**	**41**		0.70	0.50	0.86	Sciolto
12	**16.2**	**17.2**	**19.35**			0.70	0.50	0.00	Sciolto
13	**17.2**	**19.8**	**19.35**	**41**		0.70	0.50	0.86	Sciolto
14	**19.8**	**26.0**	**19.35**			0.70	0.50	0.00	Sciolto
15	**26.0**	**29.6**	**18.33**	**22**	**150**	0.35	0.50	0.40	Sciolto

1.2.5.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	1.1	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1475	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	2.83
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	5.65
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	8.48
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	14.14
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	16.96
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	19.79
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	25.45
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	28.27
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	31.10
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	33.93
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	36.76
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	39.58
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	42.41
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	45.24
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	48.1	0.00	0.00	0.00	0.00	48.07
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	50.9	0.00	0.00	0.00	0.00	50.89
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	53.7	0.00	0.00	0.00	0.00	53.72
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	56.5	0.00	0.00	0.00	0.00	56.55
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	59.4	0.00	0.00	0.00	0.00	59.38
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	62.2	0.00	0.00	0.00	0.00	62.20

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	65.0	0.00	0.00	0.00	0.00	65.03
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	67.9	0.00	0.00	0.00	0.00	67.86
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	70.7	19.80	7.46	356.97	403.73	76.66
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	73.5	19.80	14.93	358.81	405.80	85.46
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	76.3	19.80	22.39	360.64	407.87	94.26
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	79.2	19.80	29.86	362.47	409.95	103.05
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	82.0	19.80	37.32	364.31	412.02	111.85
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	84.8	19.80	44.79	366.14	414.09	120.65
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	87.7	19.80	52.25	367.97	416.17	129.45
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	90.5	19.80	59.72	369.80	418.24	138.25
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	93.3	0.00	59.72	0.00	0.00	141.08
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	96.1	0.00	59.72	0.00	0.00	143.91
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	99.0	0.00	59.72	0.00	0.00	146.73
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	101.8	0.00	59.72	0.00	0.00	149.56
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	104.6	0.00	59.72	0.00	0.00	152.39
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	107.4	0.00	59.72	0.00	0.00	155.21
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	110.3	0.00	59.72	0.00	0.00	158.04
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	113.1	19.80	67.18	385.18	435.63	166.84
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	115.9	19.80	74.64	387.02	437.70	175.64
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	118.8	19.80	82.11	388.85	439.78	184.44
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	121.6	19.80	89.57	390.68	441.85	193.24
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	124.4	19.80	97.04	392.51	443.92	202.04
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	127.2	19.80	104.50	394.35	446.00	210.84
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	130.1	19.80	111.97	396.18	448.07	219.64
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	132.9	19.80	119.43	398.01	450.14	228.43
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	135.7	19.80	126.90	399.85	452.22	237.23
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	138.5	19.80	134.36	401.68	454.29	246.03
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	141.82	403.51	456.36	254.83
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	144.2	19.80	149.29	405.35	458.43	263.63
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	147.0	19.80	156.75	407.18	460.51	272.43
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	149.9	19.80	164.22	409.01	462.58	281.23
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	152.7	19.80	171.68	410.84	464.65	290.03
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	155.5	19.80	179.15	412.68	466.73	298.83
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	158.3	19.80	186.61	414.51	468.80	307.62
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	161.2	19.80	194.08	416.34	470.87	316.42
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	164.0	19.80	201.54	418.18	472.95	325.22
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	166.8	19.80	209.00	420.01	475.02	334.02
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	169.6	19.80	216.47	421.84	477.09	342.82
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	172.5	19.80	223.93	423.68	479.17	351.62
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	175.3	19.80	231.40	425.51	481.24	360.42
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	178.1	19.80	238.86	427.34	483.31	369.22
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	181.0	19.80	246.33	429.17	485.38	378.02
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	183.8	19.80	253.79	431.01	487.46	386.82
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	186.6	19.80	261.25	432.84	489.53	395.61
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	189.4	19.80	268.72	434.67	491.60	404.41
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	192.3	19.80	276.18	436.51	493.68	413.21
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	195.1	19.80	283.65	438.34	495.75	422.01

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	197.9	19.80	291.11	440.17	497.82	430.81
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	200.7	19.80	298.58	442.01	499.90	439.61
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	203.6	19.80	306.04	443.84	501.97	448.41
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	206.4	19.80	313.51	445.67	504.04	457.21
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	209.2	19.80	320.97	447.50	506.12	466.01
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	212.1	19.80	328.43	449.34	508.19	474.81
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	214.9	19.80	335.90	451.17	510.26	483.60
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	217.7	19.80	343.36	453.00	512.33	492.40
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	220.5	39.08	358.10	3542.49	4006.46	507.02
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	223.4	39.46	372.97	3576.76	4045.22	521.74
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	226.2	39.83	387.99	3611.03	4083.98	536.59
10.1	8.1	6	0.70	0.50	0.79	35.40	35.92	229.0	40.21	403.15	3645.30	4122.74	551.54
10.2	8.2	6	0.70	0.50	0.79	35.40	35.92	231.8	40.59	418.45	3679.57	4161.50	566.61
10.3	8.3	6	0.70	0.50	0.79	35.40	35.92	234.7	40.97	433.90	3713.85	4200.26	581.79
10.4	8.4	6	0.70	0.50	0.79	35.40	35.92	237.5	41.35	449.48	3748.12	4239.02	597.09
10.5	8.5	6	0.70	0.50	0.79	35.40	35.92	240.3	41.73	465.21	3782.39	4277.78	612.50
10.6	8.6	7	0.35	0.50	0.40	19.00	3.57	243.2	28.00	475.77	920.32	1040.85	623.77
10.7	8.7	7	0.35	0.50	0.40	19.00	3.57	246.0	28.00	486.32	922.15	1042.93	635.05
10.8	8.8	7	0.35	0.50	0.40	19.00	3.57	248.8	28.00	496.88	923.98	1045.00	646.32
10.9	8.9	7	0.35	0.50	0.40	19.00	3.57	251.6	28.00	507.44	925.82	1047.07	657.59
11.0	9.0	7	0.35	0.50	0.40	19.00	3.57	254.5	28.00	517.99	927.65	1049.15	668.86
11.1	9.1	7	0.35	0.50	0.40	19.00	3.57	257.3	28.00	528.55	929.48	1051.22	680.13
11.2	9.2	7	0.35	0.50	0.40	19.00	3.57	260.1	28.00	539.10	931.31	1053.29	691.41
11.3	9.3	7	0.35	0.50	0.40	19.00	3.57	263.0	28.00	549.66	933.15	1055.36	702.68
11.4	9.4	7	0.35	0.50	0.40	19.00	3.57	265.8	28.00	560.21	934.98	1057.44	713.95
11.5	9.5	7	0.35	0.50	0.40	19.00	3.57	268.6	28.00	570.77	936.81	1059.51	725.22
11.6	9.6	7	0.35	0.50	0.40	19.00	3.57	271.4	28.00	581.33	938.65	1061.58	736.49
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	274.3	0.00	581.33	0.00	0.00	739.32
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	277.1	0.00	581.33	0.00	0.00	742.15
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	279.9	0.00	581.33	0.00	0.00	744.98
12.0	10.0	9	0.70	0.50	0.90	38.85	50.66	282.7	53.06	601.33	6001.94	6788.03	763.81
12.1	10.1	9	0.70	0.50	0.90	38.85	50.64	285.6	53.49	621.49	6048.05	6840.18	782.76
12.2	10.2	9	0.70	0.50	0.90	38.85	50.62	288.4	53.91	641.82	6094.11	6892.27	801.85
12.3	10.3	9	0.70	0.50	0.90	38.85	50.60	291.2	54.34	662.30	6140.12	6944.31	821.07
12.4	10.4	9	0.70	0.50	0.90	38.85	50.58	294.1	54.77	682.95	6186.09	6996.30	840.41
12.5	10.5	9	0.70	0.50	0.90	38.85	50.57	296.9	55.19	703.76	6232.00	7048.23	859.89
12.6	10.6	9	0.70	0.50	0.90	38.85	50.55	299.7	55.62	724.73	6277.87	7100.11	879.49
12.7	10.7	9	0.70	0.50	0.90	38.85	50.53	302.5	56.05	745.85	6323.69	7151.93	899.22
12.8	10.8	9	0.70	0.50	0.90	38.85	50.51	305.4	56.48	767.15	6369.47	7203.70	919.08
12.9	10.9	9	0.70	0.50	0.90	38.85	50.49	308.2	56.90	788.60	6415.19	7255.41	939.07
13.0	11.0	9	0.70	0.50	0.90	38.85	50.47	311.0	57.33	810.21	6460.86	7307.06	959.19
13.1	11.1	9	0.70	0.50	0.90	38.85	50.45	313.8	57.76	831.98	6506.48	7358.66	979.43
13.2	11.2	9	0.70	0.50	0.90	38.85	50.43	316.7	58.18	853.92	6552.06	7410.20	999.81
13.3	11.3	9	0.70	0.50	0.90	38.85	50.41	319.5	58.61	876.02	6597.58	7461.69	1020.31
13.4	11.4	9	0.70	0.50	0.90	38.85	50.39	322.3	59.04	898.27	6643.05	7513.11	1040.95
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	325.2	0.00	898.27	0.00	0.00	1043.77
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	328.0	0.00	898.27	0.00	0.00	1046.60

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	330.8	0.00	898.27	0.00	0.00	1049.43
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	333.6	0.00	898.27	0.00	0.00	1052.26
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	336.5	0.00	898.27	0.00	0.00	1055.08
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	339.3	0.00	898.27	0.00	0.00	1057.91
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	342.1	0.00	898.27	0.00	0.00	1060.74
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	344.9	0.00	898.27	0.00	0.00	1063.57
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	347.8	0.00	898.27	0.00	0.00	1066.39
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	350.6	0.00	898.27	0.00	0.00	1069.22
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	353.4	0.00	898.27	0.00	0.00	1072.05
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	61.62	921.50	6424.74	7266.21	1093.46
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.03	944.89	6464.73	7311.44	1115.00
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.44	968.43	6504.67	7356.61	1136.65
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	62.85	992.12	6544.56	7401.73	1158.44
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.26	1015.97	6584.40	7446.78	1180.34
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	63.67	1039.98	6624.19	7491.78	1202.37
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.08	1064.13	6663.93	7536.72	1224.53
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.49	1088.45	6703.61	7581.61	1246.81
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	64.90	1112.91	6743.25	7626.43	1269.21
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.31	1137.54	6782.83	7671.20	1291.73
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	65.72	1162.31	6822.36	7715.90	1314.38
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.13	1187.24	6861.83	7760.55	1337.15
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.54	1212.33	6901.26	7805.14	1360.05
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	66.95	1237.57	6940.63	7849.66	1383.07
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.36	1262.97	6979.94	7894.13	1406.21
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	67.77	1288.52	7019.21	7938.54	1429.48
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.18	1314.22	7058.42	7982.88	1452.87
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1314.22	0.00	0.00	1455.70
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1314.22	0.00	0.00	1458.53
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1314.22	0.00	0.00	1461.36
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1314.22	0.00	0.00	1464.18
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	415.6	0.00	1314.22	0.00	0.00	1467.01
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	418.5	0.00	1314.22	0.00	0.00	1469.84
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	421.3	0.00	1314.22	0.00	0.00	1472.67
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	424.1	0.00	1314.22	0.00	0.00	1475.49

1.2.5.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1171	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	1.96
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	3.93
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	5.89
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	7.85
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	9.82
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	11.78
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	13.74
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	15.71
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	17.67
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	19.63
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	21.60
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	23.56
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	25.53
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	27.49
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	29.45
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	31.4	0.00	0.00	0.00	0.00	31.42
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	33.4	0.00	0.00	0.00	0.00	33.38
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	35.3	0.00	0.00	0.00	0.00	35.34
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	37.3	0.00	0.00	0.00	0.00	37.31
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	39.3	0.00	0.00	0.00	0.00	39.27
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	41.2	0.00	0.00	0.00	0.00	41.23
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	43.2	0.00	0.00	0.00	0.00	43.20

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	45.2	0.00	0.00	0.00	0.00	45.16
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	47.1	0.00	0.00	0.00	0.00	47.12
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	49.1	19.80	6.22	356.97	280.37	54.06
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	51.1	19.80	12.44	358.81	281.81	61.00
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	53.0	19.80	18.66	360.64	283.25	67.94
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	55.0	19.80	24.88	362.47	284.68	74.88
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	56.9	19.80	31.10	364.31	286.12	81.82
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	58.9	19.80	37.32	366.14	287.56	88.76
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	60.9	19.80	43.54	367.97	289.00	95.70
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	62.8	19.80	49.76	369.80	290.44	102.64
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	64.8	0.00	49.76	0.00	0.00	104.61
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	66.8	0.00	49.76	0.00	0.00	106.57
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	68.7	0.00	49.76	0.00	0.00	108.53
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	70.7	0.00	49.76	0.00	0.00	110.50
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	72.6	0.00	49.76	0.00	0.00	112.46
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	74.6	0.00	49.76	0.00	0.00	114.42
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	76.6	0.00	49.76	0.00	0.00	116.39
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	78.5	19.80	55.98	385.18	302.52	123.33
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	80.5	19.80	62.20	387.02	303.96	130.27
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	82.5	19.80	68.42	388.85	305.40	137.21
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	84.4	19.80	74.64	390.68	306.84	144.15
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	86.4	19.80	80.86	392.51	308.28	151.09
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	88.4	19.80	87.08	394.35	309.72	158.03
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	90.3	19.80	93.31	396.18	311.16	164.97
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	92.3	19.80	99.53	398.01	312.60	171.90
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	94.2	19.80	105.75	399.85	314.04	178.84
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	96.2	19.80	111.97	401.68	315.48	185.78
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	98.2	19.80	118.19	403.51	316.92	192.72
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	100.1	19.80	124.41	405.35	318.36	199.66
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	102.1	19.80	130.63	407.18	319.80	206.60
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	104.1	19.80	136.85	409.01	321.24	213.54
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	106.0	19.80	143.07	410.84	322.68	220.48
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	108.0	19.80	149.29	412.68	324.12	227.42
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	110.0	19.80	155.51	414.51	325.56	234.36
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	111.9	19.80	161.73	416.34	327.00	241.30
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	113.9	19.80	167.95	418.18	328.43	248.24
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	115.8	19.80	174.17	420.01	329.87	255.18
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	117.8	19.80	180.39	421.84	331.31	262.12
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	119.8	19.80	186.61	423.68	332.75	269.06
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	121.7	19.80	192.83	425.51	334.19	276.00
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	123.7	19.80	199.05	427.34	335.63	282.94
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	125.7	19.80	205.27	429.17	337.07	289.88
8.5	6.5	5	0.66	0.50	0.40	19.00	3.57	127.6	19.80	211.49	431.01	338.51	296.82
8.6	6.6	5	0.66	0.50	0.40	19.00	3.57	129.6	19.80	217.71	432.84	339.95	303.76
8.7	6.7	5	0.66	0.50	0.40	19.00	3.57	131.6	19.80	223.93	434.67	341.39	310.70
8.8	6.8	5	0.66	0.50	0.40	19.00	3.57	133.5	19.80	230.15	436.51	342.83	317.64
8.9	6.9	5	0.66	0.50	0.40	19.00	3.57	135.5	19.80	236.37	438.34	344.27	324.58

9.0	7.0	5	0.66	0.50	0.40	19.00	3.57	137.4	19.80	242.59	440.17	345.71	331.52
9.1	7.1	5	0.66	0.50	0.40	19.00	3.57	139.4	19.80	248.81	442.01	347.15	338.46
9.2	7.2	5	0.66	0.50	0.40	19.00	3.57	141.4	19.80	255.03	443.84	348.59	345.40
9.3	7.3	5	0.66	0.50	0.40	19.00	3.57	143.3	19.80	261.25	445.67	350.03	352.34
9.4	7.4	5	0.66	0.50	0.40	19.00	3.57	145.3	19.80	267.48	447.50	351.47	359.28
9.5	7.5	5	0.66	0.50	0.40	19.00	3.57	147.3	19.80	273.70	449.34	352.91	366.22
9.6	7.6	5	0.66	0.50	0.40	19.00	3.57	149.2	19.80	279.92	451.17	354.35	373.16
9.7	7.7	5	0.66	0.50	0.40	19.00	3.57	151.2	19.80	286.14	453.00	355.79	380.10
9.8	7.8	6	0.70	0.50	0.79	35.40	35.92	153.2	39.08	298.41	3542.49	2782.26	391.88
9.9	7.9	6	0.70	0.50	0.79	35.40	35.92	155.1	39.46	310.81	3576.76	2809.18	403.76
10.0	8.0	6	0.70	0.50	0.79	35.40	35.92	157.1	39.83	323.32	3611.03	2836.10	415.74
10.1	8.1	6	0.70	0.50	0.79	35.40	35.91	159.0	40.21	335.96	3643.61	2861.69	427.81
10.2	8.2	6	0.70	0.50	0.79	35.40	35.89	161.0	40.59	348.71	3676.15	2887.24	439.97
10.3	8.3	6	0.70	0.50	0.79	35.40	35.87	163.0	40.97	361.58	3708.65	2912.77	452.23
10.4	8.4	6	0.70	0.50	0.79	35.40	35.86	164.9	41.35	374.57	3741.11	2938.26	464.59
10.5	8.5	6	0.70	0.50	0.79	35.40	35.84	166.9	41.73	387.68	3773.52	2963.72	477.04
10.6	8.6	7	0.35	0.50	0.40	19.00	3.55	168.9	28.00	396.47	920.32	722.81	486.04
10.7	8.7	7	0.35	0.50	0.40	19.00	3.55	170.8	28.00	405.27	922.15	724.25	495.04
10.8	8.8	7	0.35	0.50	0.40	19.00	3.55	172.8	28.00	414.07	923.98	725.69	504.04
10.9	8.9	7	0.35	0.50	0.40	19.00	3.55	174.8	28.00	422.86	925.82	727.13	513.04
11.0	9.0	7	0.35	0.50	0.40	19.00	3.54	176.7	28.00	431.66	927.65	728.57	522.04
11.1	9.1	7	0.35	0.50	0.40	19.00	3.54	178.7	28.00	440.46	929.48	730.01	531.04
11.2	9.2	7	0.35	0.50	0.40	19.00	3.54	180.6	28.00	449.25	931.31	731.45	540.04
11.3	9.3	7	0.35	0.50	0.40	19.00	3.54	182.6	28.00	458.05	933.15	732.89	549.04
11.4	9.4	7	0.35	0.50	0.40	19.00	3.53	184.6	28.00	466.85	934.98	734.33	558.04
11.5	9.5	7	0.35	0.50	0.40	19.00	3.53	186.5	28.00	475.64	936.81	735.77	567.05
11.6	9.6	7	0.35	0.50	0.40	19.00	3.53	188.5	28.00	484.44	938.65	737.21	576.05
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	190.5	0.00	484.44	0.00	0.00	578.01
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	192.4	0.00	484.44	0.00	0.00	579.97
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	194.4	0.00	484.44	0.00	0.00	581.94
12.0	10.0	9	0.70	0.50	0.90	38.85	50.27	196.3	53.06	501.11	5955.66	4677.57	597.24
12.1	10.1	9	0.70	0.50	0.90	38.85	50.24	198.3	53.49	517.91	6000.67	4712.92	612.64
12.2	10.2	9	0.70	0.50	0.90	38.85	50.22	200.3	53.91	534.85	6045.61	4748.21	628.15
12.3	10.3	9	0.70	0.50	0.90	38.85	50.19	202.2	54.34	551.92	6090.49	4783.46	643.77
12.4	10.4	9	0.70	0.50	0.90	38.85	50.17	204.2	54.77	569.12	6135.30	4818.66	659.50
12.5	10.5	9	0.70	0.50	0.90	38.85	50.14	206.2	55.19	586.46	6180.05	4853.80	675.34
12.6	10.6	9	0.70	0.50	0.90	38.85	50.12	208.1	55.62	603.94	6224.73	4888.89	691.28
12.7	10.7	9	0.70	0.50	0.90	38.85	50.09	210.1	56.05	621.55	6269.34	4923.93	707.33
12.8	10.8	9	0.70	0.50	0.90	38.85	50.07	212.1	56.48	639.29	6313.89	4958.91	723.49
12.9	10.9	9	0.70	0.50	0.90	38.85	50.04	214.0	56.90	657.16	6358.36	4993.85	739.75
13.0	11.0	9	0.70	0.50	0.90	38.85	50.02	216.0	57.33	675.18	6402.77	5028.73	756.13
13.1	11.1	9	0.70	0.50	0.90	38.85	49.99	217.9	57.76	693.32	6447.11	5063.55	772.60
13.2	11.2	9	0.70	0.50	0.90	38.85	49.96	219.9	58.18	711.60	6491.39	5098.32	789.19
13.3	11.3	9	0.70	0.50	0.90	38.85	49.94	221.9	58.61	730.01	6535.59	5133.04	805.89
13.4	11.4	9	0.70	0.50	0.90	38.85	49.91	223.8	59.04	748.56	6579.72	5167.70	822.69
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	225.8	0.00	748.56	0.00	0.00	824.65
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	227.8	0.00	748.56	0.00	0.00	826.61

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	229.7	0.00	748.56	0.00	0.00	828.58
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	231.7	0.00	748.56	0.00	0.00	830.54
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	233.7	0.00	748.56	0.00	0.00	832.51
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	235.6	0.00	748.56	0.00	0.00	834.47
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	237.6	0.00	748.56	0.00	0.00	836.43
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	239.5	0.00	748.56	0.00	0.00	838.40
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	241.5	0.00	748.56	0.00	0.00	840.36
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	243.5	0.00	748.56	0.00	0.00	842.32
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	245.4	0.00	748.56	0.00	0.00	844.29
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	61.62	767.92	6350.93	4988.01	861.74
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.03	787.41	6389.47	5018.28	879.29
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.44	807.02	6427.93	5048.49	896.95
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	62.85	826.77	6466.33	5078.64	914.71
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.26	846.64	6504.65	5108.74	932.57
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	63.67	866.65	6542.91	5138.79	950.53
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.08	886.78	6581.09	5168.78	968.60
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.49	907.04	6619.20	5198.71	986.78
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	64.90	927.43	6657.24	5228.58	1005.05
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.31	947.95	6695.20	5258.40	1023.43
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	65.72	968.59	6733.10	5288.16	1041.91
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.13	989.37	6770.92	5317.87	1060.50
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.54	1010.28	6808.66	5347.51	1079.18
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	66.95	1031.31	6846.33	5377.10	1097.97
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.36	1052.47	6883.93	5406.63	1116.87
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	67.77	1073.77	6921.45	5436.10	1135.87
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.18	1095.19	6958.90	5465.51	1154.97
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1095.19	0.00	0.00	1156.93
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1095.19	0.00	0.00	1158.89
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1095.19	0.00	0.00	1160.86
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1095.19	0.00	0.00	1162.82
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	288.6	0.00	1095.19	0.00	0.00	1164.78
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	290.6	0.00	1095.19	0.00	0.00	1166.75
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	292.6	0.00	1095.19	0.00	0.00	1168.71
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	294.5	0.00	1095.19	0.00	0.00	1170.67

1.2.5.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1.0**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	889	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	1	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	1.26
2.2	0.2	1	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	2.51
2.3	0.3	1	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	3.77
2.4	0.4	1	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	5.03
2.5	0.5	1	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	6.28
2.6	0.6	1	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	7.54
2.7	0.7	1	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	8.80
2.8	0.8	1	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	10.05
2.9	0.9	1	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
3.0	1.0	1	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	12.57
3.1	1.1	1	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	13.82
3.2	1.2	1	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	15.08
3.3	1.3	1	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	16.34
3.4	1.4	2	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	17.59
3.5	1.5	2	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	18.85
3.6	1.6	2	0.70	0.50	0.00	0.00	0.00	20.1	0.00	0.00	0.00	0.00	20.11
3.7	1.7	2	0.70	0.50	0.00	0.00	0.00	21.4	0.00	0.00	0.00	0.00	21.36
3.8	1.8	2	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
3.9	1.9	2	0.70	0.50	0.00	0.00	0.00	23.9	0.00	0.00	0.00	0.00	23.88
4.0	2.0	2	0.70	0.50	0.00	0.00	0.00	25.1	0.00	0.00	0.00	0.00	25.13
4.1	2.1	2	0.70	0.50	0.00	0.00	0.00	26.4	0.00	0.00	0.00	0.00	26.39
4.2	2.2	2	0.70	0.50	0.00	0.00	0.00	27.6	0.00	0.00	0.00	0.00	27.65

4.3	2.3	2	0.70	0.50	0.00	0.00	0.00	28.9	0.00	0.00	0.00	0.00	28.90
4.4	2.4	2	0.70	0.50	0.00	0.00	0.00	30.2	0.00	0.00	0.00	0.00	30.16
4.5	2.5	3	0.66	0.50	0.40	19.00	3.57	31.4	19.80	4.98	356.97	179.43	35.40
4.6	2.6	3	0.66	0.50	0.40	19.00	3.57	32.7	19.80	9.95	358.81	180.36	40.63
4.7	2.7	3	0.66	0.50	0.40	19.00	3.57	33.9	19.80	14.93	360.64	181.28	45.87
4.8	2.8	3	0.66	0.50	0.40	19.00	3.57	35.2	19.80	19.91	362.47	182.20	51.11
4.9	2.9	3	0.66	0.50	0.40	19.00	3.57	36.4	19.80	24.88	364.31	183.12	56.35
5.0	3.0	3	0.66	0.50	0.40	19.00	3.57	37.7	19.80	29.86	366.14	184.04	61.59
5.1	3.1	3	0.66	0.50	0.40	19.00	3.57	39.0	19.80	34.83	367.97	184.96	66.82
5.2	3.2	3	0.66	0.50	0.40	19.00	3.57	40.2	19.80	39.81	369.80	185.88	72.06
5.3	3.3	4	0.70	0.50	0.00	0.00	0.00	41.5	0.00	39.81	0.00	0.00	73.32
5.4	3.4	4	0.70	0.50	0.00	0.00	0.00	42.7	0.00	39.81	0.00	0.00	74.57
5.5	3.5	4	0.70	0.50	0.00	0.00	0.00	44.0	0.00	39.81	0.00	0.00	75.83
5.6	3.6	4	0.70	0.50	0.00	0.00	0.00	45.2	0.00	39.81	0.00	0.00	77.09
5.7	3.7	4	0.70	0.50	0.00	0.00	0.00	46.5	0.00	39.81	0.00	0.00	78.34
5.8	3.8	4	0.70	0.50	0.00	0.00	0.00	47.8	0.00	39.81	0.00	0.00	79.60
5.9	3.9	4	0.70	0.50	0.00	0.00	0.00	49.0	0.00	39.81	0.00	0.00	80.86
6.0	4.0	5	0.66	0.50	0.40	19.00	3.57	50.3	19.80	44.79	385.18	193.61	86.09
6.1	4.1	5	0.66	0.50	0.40	19.00	3.57	51.5	19.80	49.76	387.02	194.53	91.33
6.2	4.2	5	0.66	0.50	0.40	19.00	3.57	52.8	19.80	54.74	388.85	195.46	96.57
6.3	4.3	5	0.66	0.50	0.40	19.00	3.57	54.0	19.80	59.72	390.68	196.38	101.81
6.4	4.4	5	0.66	0.50	0.40	19.00	3.57	55.3	19.80	64.69	392.51	197.30	107.05
6.5	4.5	5	0.66	0.50	0.40	19.00	3.57	56.5	19.80	69.67	394.35	198.22	112.28
6.6	4.6	5	0.66	0.50	0.40	19.00	3.57	57.8	19.80	74.64	396.18	199.14	117.52
6.7	4.7	5	0.66	0.50	0.40	19.00	3.57	59.1	19.80	79.62	398.01	200.06	122.76
6.8	4.8	5	0.66	0.50	0.40	19.00	3.57	60.3	19.80	84.60	399.85	200.98	128.00
6.9	4.9	5	0.66	0.50	0.40	19.00	3.57	61.6	19.80	89.57	401.68	201.91	133.23
7.0	5.0	5	0.66	0.50	0.40	19.00	3.57	62.8	19.80	94.55	403.51	202.83	138.47
7.1	5.1	5	0.66	0.50	0.40	19.00	3.57	64.1	19.80	99.53	405.35	203.75	143.71
7.2	5.2	5	0.66	0.50	0.40	19.00	3.57	65.3	19.80	104.50	407.18	204.67	148.95
7.3	5.3	5	0.66	0.50	0.40	19.00	3.57	66.6	19.80	109.48	409.01	205.59	154.18
7.4	5.4	5	0.66	0.50	0.40	19.00	3.57	67.9	19.80	114.45	410.84	206.51	159.42
7.5	5.5	5	0.66	0.50	0.40	19.00	3.57	69.1	19.80	119.43	412.68	207.43	164.66
7.6	5.6	5	0.66	0.50	0.40	19.00	3.57	70.4	19.80	124.41	414.51	208.36	169.90
7.7	5.7	5	0.66	0.50	0.40	19.00	3.57	71.6	19.80	129.38	416.34	209.28	175.13
7.8	5.8	5	0.66	0.50	0.40	19.00	3.57	72.9	19.80	134.36	418.18	210.20	180.37
7.9	5.9	5	0.66	0.50	0.40	19.00	3.57	74.1	19.80	139.34	420.01	211.12	185.61
8.0	6.0	5	0.66	0.50	0.40	19.00	3.57	75.4	19.80	144.31	421.84	212.04	190.85
8.1	6.1	5	0.66	0.50	0.40	19.00	3.57	76.7	19.80	149.29	423.68	212.96	196.09
8.2	6.2	5	0.66	0.50	0.40	19.00	3.57	77.9	19.80	154.26	425.51	213.88	201.32
8.3	6.3	5	0.66	0.50	0.40	19.00	3.57	79.2	19.80	159.24	427.34	214.81	206.56
8.4	6.4	5	0.66	0.50	0.40	19.00	3.57	80.4	19.80	164.22	429.17	215.73	211.80
8.5	6.5	5	0.66	0.50	0.40	19.00	3.56	81.7	19.80	169.19	431.01	216.65	217.04
8.6	6.6	5	0.66	0.50	0.40	19.00	3.56	82.9	19.80	174.17	432.84	217.57	222.27
8.7	6.7	5	0.66	0.50	0.40	19.00	3.56	84.2	19.80	179.15	434.67	218.49	227.51
8.8	6.8	5	0.66	0.50	0.40	19.00	3.56	85.5	19.80	184.12	436.51	219.41	232.75
8.9	6.9	5	0.66	0.50	0.40	19.00	3.55	86.7	19.80	189.10	438.34	220.33	237.99

9.0	7.0	5	0.66	0.50	0.40	19.00	3.55	88.0	19.80	194.08	440.17	221.25	243.22
9.1	7.1	5	0.66	0.50	0.40	19.00	3.55	89.2	19.80	199.05	442.01	222.18	248.46
9.2	7.2	5	0.66	0.50	0.40	19.00	3.54	90.5	19.80	204.03	443.84	223.10	253.70
9.3	7.3	5	0.66	0.50	0.40	19.00	3.54	91.7	19.80	209.00	445.67	224.02	258.94
9.4	7.4	5	0.66	0.50	0.40	19.00	3.54	93.0	19.80	213.98	447.50	224.94	264.18
9.5	7.5	5	0.66	0.50	0.40	19.00	3.53	94.2	19.80	218.96	449.34	225.86	269.41
9.6	7.6	5	0.66	0.50	0.40	19.00	3.53	95.5	19.80	223.93	451.17	226.78	274.65
9.7	7.7	5	0.66	0.50	0.40	19.00	3.53	96.8	19.80	228.91	453.00	227.70	279.89
9.8	7.8	6	0.70	0.50	0.79	35.40	35.62	98.0	39.08	238.73	3512.36	1765.51	289.00
9.9	7.9	6	0.70	0.50	0.79	35.40	35.60	99.3	39.46	248.65	3544.05	1781.44	298.19
10.0	8.0	6	0.70	0.50	0.79	35.40	35.57	100.5	39.83	258.66	3575.68	1797.34	307.46
10.1	8.1	6	0.70	0.50	0.79	35.40	35.55	101.8	40.21	268.77	3607.26	1813.20	316.80
10.2	8.2	6	0.70	0.50	0.79	35.40	35.53	103.0	40.59	278.97	3638.77	1829.04	326.22
10.3	8.3	6	0.70	0.50	0.79	35.40	35.50	104.3	40.97	289.26	3670.22	1844.85	335.71
10.4	8.4	6	0.70	0.50	0.79	35.40	35.48	105.6	41.35	299.66	3701.61	1860.63	345.28
10.5	8.5	6	0.70	0.50	0.79	35.40	35.45	106.8	41.73	310.14	3732.93	1876.38	354.93
10.6	8.6	7	0.35	0.50	0.40	19.00	3.50	108.1	28.00	317.18	920.32	462.60	361.81
10.7	8.7	7	0.35	0.50	0.40	19.00	3.49	109.3	28.00	324.22	922.15	463.52	368.70
10.8	8.8	7	0.35	0.50	0.40	19.00	3.49	110.6	28.00	331.25	923.98	464.44	375.59
10.9	8.9	7	0.35	0.50	0.40	19.00	3.49	111.8	28.00	338.29	925.82	465.37	382.47
11.0	9.0	7	0.35	0.50	0.40	19.00	3.48	113.1	28.00	345.33	927.65	466.29	389.36
11.1	9.1	7	0.35	0.50	0.40	19.00	3.48	114.4	28.00	352.36	929.48	467.21	396.25
11.2	9.2	7	0.35	0.50	0.40	19.00	3.48	115.6	28.00	359.40	931.31	468.13	403.13
11.3	9.3	7	0.35	0.50	0.40	19.00	3.47	116.9	28.00	366.44	933.15	469.05	410.02
11.4	9.4	7	0.35	0.50	0.40	19.00	3.47	118.1	28.00	373.48	934.98	469.97	416.90
11.5	9.5	7	0.35	0.50	0.40	19.00	3.47	119.4	28.00	380.51	936.81	470.89	423.79
11.6	9.6	7	0.35	0.50	0.40	19.00	3.46	120.6	28.00	387.55	938.65	471.81	430.68
11.7	9.7	8	0.70	0.50	0.00	0.00	0.00	121.9	0.00	387.55	0.00	0.00	431.93
11.8	9.8	8	0.70	0.50	0.00	0.00	0.00	123.2	0.00	387.55	0.00	0.00	433.19
11.9	9.9	8	0.70	0.50	0.00	0.00	0.00	124.4	0.00	387.55	0.00	0.00	434.45
12.0	10.0	9	0.70	0.50	0.90	38.85	49.61	125.7	53.06	400.89	5877.27	2954.24	446.37
12.1	10.1	9	0.70	0.50	0.90	38.85	49.57	126.9	53.49	414.33	5920.35	2975.89	458.38
12.2	10.2	9	0.70	0.50	0.90	38.85	49.54	128.2	53.91	427.88	5963.33	2997.50	470.48
12.3	10.3	9	0.70	0.50	0.90	38.85	49.50	129.4	54.34	441.53	6006.22	3019.05	482.66
12.4	10.4	9	0.70	0.50	0.90	38.85	49.46	130.7	54.77	455.30	6049.00	3040.56	494.93
12.5	10.5	9	0.70	0.50	0.90	38.85	49.43	131.9	55.19	469.17	6091.69	3062.02	507.28
12.6	10.6	9	0.70	0.50	0.90	38.85	49.39	133.2	55.62	483.15	6134.28	3083.42	519.72
12.7	10.7	9	0.70	0.50	0.90	38.85	49.35	134.5	56.05	497.24	6176.77	3104.78	532.25
12.8	10.8	9	0.70	0.50	0.90	38.85	49.32	135.7	56.48	511.43	6219.15	3126.09	544.86
12.9	10.9	9	0.70	0.50	0.90	38.85	49.28	137.0	56.90	525.73	6261.44	3147.34	557.56
13.0	11.0	9	0.70	0.50	0.90	38.85	49.24	138.2	57.33	540.14	6303.62	3168.54	570.34
13.1	11.1	9	0.70	0.50	0.90	38.85	49.20	139.5	57.76	554.66	6345.69	3189.69	583.21
13.2	11.2	9	0.70	0.50	0.90	38.85	49.16	140.7	58.18	569.28	6387.67	3210.79	596.17
13.3	11.3	9	0.70	0.50	0.90	38.85	49.13	142.0	58.61	584.01	6429.53	3231.84	609.21
13.4	11.4	9	0.70	0.50	0.90	38.85	49.09	143.3	59.04	598.85	6471.30	3252.83	622.34
13.5	11.5	10	0.70	0.50	0.00	0.00	0.00	144.5	0.00	598.85	0.00	0.00	623.59
13.6	11.6	10	0.70	0.50	0.00	0.00	0.00	145.8	0.00	598.85	0.00	0.00	624.85

13.7	11.7	10	0.70	0.50	0.00	0.00	0.00	147.0	0.00	598.85	0.00	0.00	626.11
13.8	11.8	10	0.70	0.50	0.00	0.00	0.00	148.3	0.00	598.85	0.00	0.00	627.36
13.9	11.9	10	0.70	0.50	0.00	0.00	0.00	149.5	0.00	598.85	0.00	0.00	628.62
14.0	12.0	10	0.70	0.50	0.00	0.00	0.00	150.8	0.00	598.85	0.00	0.00	629.88
14.1	12.1	10	0.70	0.50	0.00	0.00	0.00	152.1	0.00	598.85	0.00	0.00	631.13
14.2	12.2	10	0.70	0.50	0.00	0.00	0.00	153.3	0.00	598.85	0.00	0.00	632.39
14.3	12.3	10	0.70	0.50	0.00	0.00	0.00	154.6	0.00	598.85	0.00	0.00	633.65
14.4	12.4	10	0.70	0.50	0.00	0.00	0.00	155.8	0.00	598.85	0.00	0.00	634.90
14.5	12.5	10	0.70	0.50	0.00	0.00	0.00	157.1	0.00	598.85	0.00	0.00	636.16
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	61.62	614.34	6223.90	3128.47	649.80
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.03	629.93	6259.84	3146.54	663.53
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.44	645.62	6295.68	3164.55	677.34
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	62.85	661.42	6333.77	3183.70	691.24
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.26	677.31	6371.82	3202.83	705.21
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	63.67	693.32	6409.83	3221.93	719.27
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.08	709.42	6447.80	3241.02	733.41
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.49	725.63	6485.73	3260.09	747.64
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	64.90	741.94	6523.62	3279.13	761.94
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.31	758.36	6561.47	3298.15	776.33
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	65.72	774.88	6599.28	3317.16	790.80
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.13	791.50	6637.04	3336.14	805.36
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.54	808.22	6674.77	3355.10	819.99
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	66.95	825.05	6712.45	3374.05	834.71
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.36	841.98	6750.09	3392.97	849.51
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	67.77	859.01	6787.70	3411.87	864.40
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.18	876.15	6825.26	3430.75	879.36
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	876.15	0.00	0.00	880.62
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	876.15	0.00	0.00	881.87
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	876.15	0.00	0.00	883.13
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	876.15	0.00	0.00	884.39
16.7	14.7	12	0.70	0.50	0.00	0.00	0.00	184.7	0.00	876.15	0.00	0.00	885.64
16.8	14.8	12	0.70	0.50	0.00	0.00	0.00	186.0	0.00	876.15	0.00	0.00	886.90
16.9	14.9	12	0.70	0.50	0.00	0.00	0.00	187.2	0.00	876.15	0.00	0.00	888.16
17.0	15.0	12	0.70	0.50	0.00	0.00	0.00	188.5	0.00	876.15	0.00	0.00	889.41

1.2.6 Calcolo del carico limite con riferimento alla prova CPTu2bis

1.2.6.1 Condizioni statiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	0.0	1.6	19.35	35		0.70	0.50	0.70
2	1.6	2.0	18.33	22	35	0.62	0.50	0.40
3	2.0	3.5	19.35	35		0.70	0.50	0.70
4	3.5	4.2	19.35	40		0.70	0.50	0.83
5	4.2	4.8	18.33	22	25	0.70	0.50	0.40
6	4.8	5.8	19.35	34		0.70	0.50	0.67
7	5.8	7.8	18.33	22	35	0.62	0.50	0.40
8	7.8	8.7	19.35	38		0.70	0.50	0.79
9	8.7	10.5	18.33	22	35	0.62	0.50	0.40
10	10.5	10.8	19.35	36		0.70	0.50	0.73
11	10.8	16.2	19.35	41		0.70	0.50	0.86
12	16.2	16.6	19.35	36		0.70	0.50	0.73
13	16.6	18.7	19.35	41		0.70	0.50	0.86
14	18.7	18.9	19.35	36		0.70	0.50	0.73
15	18.9	21.2	19.35	41		0.70	0.50	0.86
16	21.2	22.3	19.35	36		0.70	0.50	0.73
17	22.3	23.3	19.35	41		0.70	0.50	0.86
18	23.3	23.6	19.35	36		0.70	0.50	0.73
19	23.6	23.8	19.35	41		0.70	0.50	0.86
20	23.8	25.0	19.35	36		0.70	0.50	0.73

1.2.6.1.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	2087	2022

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	2.8	10.29	3.88	722.74	817.40	5.93	10.29	3.88	722.74	817.40	5.93
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	5.7	10.62	7.88	746.16	843.89	11.96	10.62	7.88	746.16	843.89	11.96
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	8.5	10.95	12.01	769.58	870.38	18.09	10.95	12.01	769.58	870.38	18.09
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	11.3	11.29	16.27	793.01	896.87	24.32	11.29	16.27	793.01	896.87	24.32
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	14.1	11.62	20.65	816.43	923.36	30.65	11.62	20.65	816.43	923.36	30.65
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	17.0	11.95	25.15	839.85	949.85	37.09	11.95	25.15	839.85	949.85	37.09
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	19.8	12.29	29.78	863.28	976.34	43.62	12.29	29.78	863.28	976.34	43.62
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	22.6	12.62	34.54	886.70	1002.83	50.25	12.62	34.54	886.70	1002.83	50.25
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	25.4	12.95	39.43	910.12	1029.33	56.99	12.95	39.43	910.12	1029.33	56.99
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	28.3	13.29	44.43	933.55	1055.82	63.82	13.29	44.43	933.55	1055.82	63.82
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	31.1	13.62	49.57	956.97	1082.31	70.76	13.62	49.57	956.97	1082.31	70.76
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	33.9	13.95	54.83	980.39	1108.80	77.79	13.95	54.83	980.39	1108.80	77.79
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	36.8	14.29	60.22	1003.82	1135.29	84.93	14.29	60.22	1003.82	1135.29	84.93
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	39.6	14.62	65.73	1027.24	1161.78	92.17	14.62	65.73	1027.24	1161.78	92.17
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	42.4	14.95	71.37	1050.66	1188.27	99.50	14.95	71.37	1050.66	1188.27	99.50
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	45.2	18.06	78.17	1769.53	2001.29	107.78	18.06	78.17	1769.53	2001.29	107.78
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	48.1	18.46	85.13	1808.12	2044.93	116.17	18.46	85.13	1808.12	2044.93	116.17
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	50.9	18.85	92.24	1846.71	2088.58	124.69	18.85	92.24	1846.71	2088.58	124.69
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	53.7	19.24	99.49	1885.30	2132.22	133.32	19.24	99.49	1885.30	2132.22	133.32
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	56.5	19.64	106.90	1923.89	2175.87	142.07	19.64	106.90	1923.89	2175.87	142.07
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	59.4	20.03	114.45	1962.48	2219.51	150.94	20.03	114.45	1962.48	2219.51	150.94
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	62.2	20.43	122.15	2001.07	2263.15	159.92	20.43	122.15	2001.07	2263.15	159.92
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	65.0	17.50	128.75	307.70	347.99	168.03	10.17	125.98	179.51	203.02	165.82

Breve termine

Lungo termine

Palo

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	67.9	17.50	135.35	309.53	350.07	176.13	10.34	129.88	182.55	206.46	171.76
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	70.7	17.50	141.94	311.36	352.14	184.24	10.51	133.84	185.59	209.90	177.76
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	73.5	17.50	148.54	313.19	354.21	192.35	10.68	137.87	188.63	213.33	183.81
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	76.3	17.50	155.14	315.03	356.29	200.45	10.85	141.96	191.67	216.77	189.91
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	79.2	17.50	161.73	316.86	358.36	208.56	11.03	146.12	194.71	220.21	196.06
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	82.0	18.59	168.74	1190.11	1345.98	216.99	18.59	153.13	1190.11	1345.98	204.50
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	84.8	18.91	175.87	1210.55	1369.10	225.52	18.91	160.25	1210.55	1369.10	213.03
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	87.7	19.23	183.12	1231.00	1392.22	234.15	19.23	167.50	1231.00	1392.22	221.65
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	90.5	19.55	190.49	1251.44	1415.35	242.87	19.55	174.87	1251.44	1415.35	230.38
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	93.3	19.87	197.98	1271.88	1438.47	251.69	19.87	182.36	1271.88	1438.47	239.19
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	96.1	20.19	205.59	1292.33	1461.59	260.60	20.19	189.97	1292.33	1461.59	248.11
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	99.0	20.50	213.32	1312.77	1484.71	269.61	20.50	197.70	1312.77	1484.71	257.12
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	101.8	20.82	221.17	1333.22	1507.83	278.72	20.82	205.55	1333.22	1507.83	266.23
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	104.6	21.14	229.14	1353.66	1530.95	287.93	21.14	213.52	1353.66	1530.95	275.43
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	107.4	21.46	237.23	1374.10	1554.07	297.23	21.46	221.61	1374.10	1554.07	284.73
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	110.3	21.70	245.41	428.04	484.11	306.60	13.13	226.56	231.78	262.13	291.52
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	113.1	21.70	253.59	429.88	486.18	315.97	13.30	231.58	234.82	265.57	298.36
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	115.9	21.70	261.77	431.71	488.25	325.34	13.47	236.65	237.86	269.01	305.25
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	118.8	21.70	269.95	433.54	490.32	334.72	13.64	241.80	240.90	272.45	312.19
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	121.6	21.70	278.13	435.38	492.40	344.09	13.81	247.00	243.93	275.88	319.18
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	124.4	21.70	286.32	437.21	494.47	353.46	13.99	252.28	246.97	279.32	326.23
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	127.2	21.70	294.50	439.04	496.54	362.83	14.16	257.61	250.01	282.76	333.33
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	130.1	21.70	302.68	440.87	498.62	372.20	14.33	263.02	253.05	286.20	340.48
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	132.9	21.70	310.86	442.71	500.69	381.58	14.50	268.48	256.09	289.63	347.68
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	135.7	21.70	319.04	444.54	502.76	390.95	14.67	274.02	259.13	293.07	354.93
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	138.5	21.70	327.22	446.37	504.84	400.32	14.85	279.61	262.17	296.51	362.24
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	141.4	21.70	335.40	448.21	506.91	409.69	15.02	285.28	265.21	299.94	369.59
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	144.2	21.70	343.58	450.04	508.98	419.06	15.19	291.00	268.25	303.38	377.00
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	147.0	21.70	351.76	451.87	511.06	428.44	15.36	296.79	271.29	306.82	384.46
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	149.9	21.70	359.94	453.71	513.13	437.81	15.54	302.65	274.33	310.26	391.97
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	152.7	21.70	368.12	455.54	515.20	447.18	15.71	308.57	277.37	313.69	399.54
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	155.5	21.70	376.30	457.37	517.27	456.55	15.88	314.56	280.41	317.13	407.16
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	158.3	21.70	384.48	459.20	519.35	465.92	16.05	320.61	283.45	320.57	414.82
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	161.2	21.70	392.66	461.04	521.42	475.30	16.22	326.73	286.48	324.01	422.54
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	164.0	21.70	400.85	462.87	523.49	484.67	16.40	332.91	289.52	327.44	430.32
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	166.8	32.54	413.11	2949.95	3336.32	497.31	32.54	345.18	2949.95	3336.32	442.96
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	169.6	32.92	425.52	2984.22	3375.08	510.07	32.92	357.59	2984.22	3375.08	455.71
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	172.5	33.30	438.08	3018.50	3413.84	522.93	33.30	370.14	3018.50	3413.84	468.58
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	175.3	33.68	450.77	3052.77	3452.60	535.92	33.68	382.83	3052.77	3452.60	481.57
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	178.1	34.05	463.61	3087.04	3491.36	549.02	34.05	395.67	3087.04	3491.36	494.67
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	181.0	34.43	476.59	3121.31	3530.12	562.23	34.43	408.65	3121.31	3530.12	507.88
8.5	6.5	8	0.70	0.50	0.79	35.40	35.92	183.8	34.81	489.71	3155.58	3568.88	575.56	34.81	421.78	3155.58	3568.88	521.20
8.6	6.6	8	0.70	0.50	0.79	35.40	35.92	186.6	35.19	502.98	3189.85	3607.64	589.00	35.19	435.04	3189.85	3607.64	534.65
8.7	6.7	8	0.70	0.50	0.79	35.40	35.92	189.4	35.57	516.39	3224.13	3646.40	602.55	35.57	448.45	3224.13	3646.40	548.20
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	192.3	21.70	524.57	482.12	545.26	611.92	18.30	455.35	323.19	365.52	556.55
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	195.1	21.70	532.75	483.95	547.34	621.29	18.47	462.32	326.23	368.96	564.95
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	197.9	21.70	540.93	485.78	549.41	630.67	18.65	469.35	329.27	372.40	573.40

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	200.7	21.70	549.11	487.62	551.48	640.04	18.82	476.44	332.31	375.83	581.90
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	203.6	21.70	557.29	489.45	553.55	649.41	18.99	483.60	335.35	379.27	590.45
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	206.4	21.70	565.47	491.28	555.63	658.78	19.16	490.82	338.39	382.71	599.06
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	209.2	21.70	573.65	493.12	557.70	668.15	19.34	498.11	341.43	386.14	607.72
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	212.1	21.70	581.83	494.95	559.77	677.53	19.51	505.47	344.47	389.58	616.43
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	214.9	21.70	590.02	496.78	561.85	686.90	19.68	512.89	347.51	393.02	625.19
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	217.7	21.70	598.20	498.62	563.92	696.27	19.85	520.37	350.54	396.46	634.01
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	220.5	21.70	606.38	500.45	565.99	705.64	20.02	527.92	353.58	399.89	642.87
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	223.4	21.70	614.56	502.28	568.07	715.01	20.20	535.53	356.62	403.33	651.79
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	226.2	21.70	622.74	504.11	570.14	724.39	20.37	543.21	359.66	406.77	660.76
10.1	8.1	9	0.62	0.50	0.40	19.00	3.57	229.0	21.70	630.92	505.95	572.21	733.76	20.54	550.95	362.70	410.21	669.79
10.2	8.2	9	0.62	0.50	0.40	19.00	3.57	231.8	21.70	639.10	507.78	574.29	743.13	20.71	558.76	365.74	413.64	678.86
10.3	8.3	9	0.62	0.50	0.40	19.00	3.57	234.7	21.70	647.28	509.61	576.36	752.50	20.88	566.64	368.78	417.08	687.99
10.4	8.4	9	0.62	0.50	0.40	19.00	3.57	237.5	21.70	655.46	511.45	578.43	761.87	21.06	574.57	371.82	420.52	697.16
10.5	8.5	9	0.62	0.50	0.40	19.00	3.57	240.3	21.70	663.64	513.28	580.50	771.25	21.23	582.58	374.86	423.96	706.39
10.6	8.6	10	0.70	0.50	0.73	33.10	28.00	243.2	38.66	678.22	2968.67	3357.49	785.73	38.66	597.15	2968.67	3357.49	720.88
10.7	8.7	10	0.70	0.50	0.73	33.10	28.00	246.0	39.01	692.92	2995.38	3387.70	800.33	39.01	611.86	2995.38	3387.70	735.47
10.8	8.8	10	0.70	0.50	0.73	33.10	28.00	248.8	39.36	707.76	3022.09	3417.90	815.02	39.36	626.70	3022.09	3417.90	750.17
10.9	8.9	11	0.70	0.50	0.86	37.70	45.38	251.6	46.83	725.42	4941.77	5589.02	831.98	46.83	644.35	4941.77	5589.02	767.12
11.0	9.0	11	0.70	0.50	0.86	37.70	45.38	254.5	47.24	743.23	4985.07	5637.98	849.05	47.24	662.16	4985.07	5637.98	784.20
11.1	9.1	11	0.70	0.50	0.86	37.70	45.38	257.3	47.65	761.19	5028.36	5686.94	866.25	47.65	680.13	5028.36	5686.94	801.40
11.2	9.2	11	0.70	0.50	0.86	37.70	45.38	260.1	48.07	779.31	5071.65	5735.90	883.57	48.07	698.25	5071.65	5735.90	818.72
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	48.48	797.59	5114.94	5784.86	901.02	48.48	716.52	5114.94	5784.86	836.17
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	48.89	816.02	5158.23	5833.82	918.59	48.89	734.95	5158.23	5833.82	853.74
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	49.30	834.60	5201.52	5882.79	936.29	49.30	753.54	5201.52	5882.79	871.44
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	49.71	853.34	5244.82	5931.75	954.11	49.71	772.28	5244.82	5931.75	889.25
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	50.12	872.23	5286.16	5978.51	972.05	50.12	791.17	5286.16	5978.51	907.20
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	50.53	891.28	5327.47	6025.22	990.11	50.53	810.22	5327.47	6025.22	925.26
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.94	910.49	5368.73	6071.89	1008.30	50.94	829.42	5368.73	6071.89	943.45
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	51.35	929.84	5409.95	6118.51	1026.62	51.35	848.78	5409.95	6118.51	961.77
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	51.76	949.36	5451.13	6165.08	1045.06	51.76	868.29	5451.13	6165.08	980.20
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	52.17	969.02	5492.26	6211.61	1063.62	52.17	887.96	5492.26	6211.61	998.76
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	52.58	988.84	5533.36	6258.08	1082.30	52.58	907.78	5533.36	6258.08	1017.45
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.99	1008.82	5574.40	6304.50	1101.11	52.99	927.75	5574.40	6304.50	1036.26
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	53.40	1028.95	5615.41	6350.88	1120.04	53.40	947.89	5615.41	6350.88	1055.19
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	53.81	1049.24	5656.37	6397.20	1139.10	53.81	968.17	5656.37	6397.20	1074.24
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	54.22	1069.68	5697.29	6443.48	1158.28	54.22	988.61	5697.29	6443.48	1093.42
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	54.63	1090.27	5738.16	6489.70	1177.58	54.63	1009.21	5738.16	6489.70	1112.73
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	55.04	1111.02	5778.98	6535.88	1197.01	55.04	1029.96	5778.98	6535.88	1132.15
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	55.45	1131.93	5819.77	6582.00	1216.56	55.45	1050.86	5819.77	6582.00	1151.71
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	55.86	1152.98	5860.50	6628.07	1236.23	55.86	1071.92	5860.50	6628.07	1171.38
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	56.27	1174.20	5901.19	6674.09	1256.03	56.27	1093.13	5901.19	6674.09	1191.18
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	56.68	1195.57	5941.84	6720.06	1275.95	56.68	1114.50	5941.84	6720.06	1211.10
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	57.09	1217.09	5982.43	6765.97	1296.00	57.09	1136.02	5982.43	6765.97	1231.15
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	57.50	1238.77	6022.99	6811.84	1316.17	57.50	1157.70	6022.99	6811.84	1251.32
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	57.91	1260.60	6063.49	6857.65	1336.46	57.91	1179.53	6063.49	6857.65	1271.61
13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	58.32	1282.59	6103.95	6903.40	1356.88	58.32	1201.52	6103.95	6903.40	1292.03

13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	58.73	1304.73	6144.36	6949.11	1377.42	58.73	1223.66	6144.36	6949.11	1312.57
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	59.14	1327.02	6184.72	6994.76	1398.08	59.14	1245.96	6184.72	6994.76	1333.23
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	59.55	1349.48	6225.04	7040.35	1418.87	59.55	1268.41	6225.04	7040.35	1354.02
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.96	1372.08	6265.31	7085.89	1439.78	59.96	1291.02	6265.31	7085.89	1374.93
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	60.37	1394.84	6305.52	7131.38	1460.82	60.37	1313.78	6305.52	7131.38	1395.97
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	60.78	1417.76	6345.69	7176.81	1481.98	60.78	1336.69	6345.69	7176.81	1417.13
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	61.19	1440.83	6385.81	7222.19	1503.26	61.19	1359.76	6385.81	7222.19	1438.41
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	61.60	1464.05	6425.89	7267.51	1524.67	61.60	1382.99	6425.89	7267.51	1459.82
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	62.01	1487.43	6465.91	7312.77	1546.20	62.01	1406.36	6465.91	7312.77	1481.35
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.43	1510.96	6505.88	7357.98	1567.86	62.43	1429.90	6505.88	7357.98	1503.00
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.84	1534.65	6545.80	7403.13	1589.63	62.84	1453.59	6545.80	7403.13	1524.78
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	63.25	1558.50	6585.67	7448.22	1611.54	63.25	1477.43	6585.67	7448.22	1546.68
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.66	1582.49	6625.49	7493.26	1633.56	63.66	1501.43	6625.49	7493.26	1568.71
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	64.07	1606.65	6665.26	7538.24	1655.71	64.07	1525.58	6665.26	7538.24	1590.86
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.48	1630.95	6704.98	7583.16	1677.98	64.48	1549.89	6704.98	7583.16	1613.13
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.89	1655.41	6744.65	7628.02	1700.38	64.89	1574.35	6744.65	7628.02	1635.53
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	65.30	1680.03	6784.27	7672.82	1722.90	65.30	1598.97	6784.27	7672.82	1658.05
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.71	1704.80	6823.83	7717.57	1745.55	65.71	1623.74	6823.83	7717.57	1680.69
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	66.12	1729.73	6863.34	7762.25	1768.31	66.12	1648.66	6863.34	7762.25	1703.46
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.53	1754.81	6902.80	7806.88	1791.21	66.53	1673.74	6902.80	7806.88	1726.35
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.94	1780.04	6942.20	7851.45	1814.22	66.94	1698.98	6942.20	7851.45	1749.37
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	67.35	1805.43	6981.55	7895.95	1837.36	67.35	1724.37	6981.55	7895.95	1772.51
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.76	1830.98	7020.85	7940.40	1860.62	67.76	1749.91	7020.85	7940.40	1795.77
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	68.17	1856.68	7060.10	7984.78	1884.01	68.17	1775.61	7060.10	7984.78	1819.16
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.58	1882.53	7099.29	8029.10	1907.52	68.58	1801.47	7099.29	8029.10	1842.67
16.3	14.3	12	0.70	0.50	0.73	33.10	27.40	404.3	58.49	1904.58	4396.19	4971.97	1927.99	58.49	1823.51	4396.19	4971.97	1863.13
16.4	14.4	12	0.70	0.50	0.73	33.10	27.39	407.2	58.84	1926.76	4420.09	4999.00	1948.56	58.84	1845.70	4420.09	4999.00	1883.71
16.5	14.5	12	0.70	0.50	0.73	33.10	27.38	410.0	59.18	1949.07	4443.95	5025.99	1969.24	59.18	1868.01	4443.95	5025.99	1904.38
16.6	14.6	12	0.70	0.50	0.73	33.10	27.36	412.8	59.53	1971.52	4467.78	5052.94	1990.02	59.53	1890.45	4467.78	5052.94	1925.17
16.7	14.7	13	0.70	0.50	0.86	37.70	44.42	415.6	70.63	1998.14	7294.41	8249.79	2014.15	70.63	1917.08	7294.41	8249.79	1949.30
16.8	14.8	13	0.70	0.50	0.86	37.70	44.39	418.5	71.04	2024.93	7333.27	8293.73	2038.40	71.04	1943.86	7333.27	8293.73	1973.55
16.9	14.9	13	0.70	0.50	0.86	37.70	44.37	421.3	71.45	2051.86	7372.07	8337.62	2062.78	71.45	1970.80	7372.07	8337.62	1997.92
17.0	15.0	13	0.70	0.50	0.86	37.70	44.35	424.1	71.86	2078.95	7410.82	8381.44	2087.28	71.86	1997.89	7410.82	8381.44	2022.43

1.2.6.1.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_3	1.475	
ξ_4	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1680	1626

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	2.0	10.29	3.23	722.74	567.64	4.55	10.29	3.23	722.74	567.64	4.55
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	3.9	10.62	6.57	746.16	586.03	9.18	10.62	6.57	746.16	586.03	9.18
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	5.9	10.95	10.01	769.58	604.43	13.90	10.95	10.01	769.58	604.43	13.90
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	7.9	11.29	13.55	793.01	622.83	18.70	11.29	13.55	793.01	622.83	18.70
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	9.8	11.62	17.21	816.43	641.22	23.58	11.62	17.21	816.43	641.22	23.58
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	11.8	11.95	20.96	839.85	659.62	28.55	11.95	20.96	839.85	659.62	28.55
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	13.7	12.29	24.82	863.28	678.02	33.60	12.29	24.82	863.28	678.02	33.60
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	15.7	12.62	28.79	886.70	696.41	38.74	12.62	28.79	886.70	696.41	38.74
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	17.7	12.95	32.85	910.12	714.81	43.96	12.95	32.85	910.12	714.81	43.96
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	19.6	13.29	37.03	933.55	733.21	49.26	13.29	37.03	933.55	733.21	49.26
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	21.6	13.62	41.31	956.97	751.60	54.64	13.62	41.31	956.97	751.60	54.64
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	23.6	13.95	45.69	980.39	770.00	60.12	13.95	45.69	980.39	770.00	60.12
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	25.5	14.29	50.18	1003.82	788.40	65.67	14.29	50.18	1003.82	788.40	65.67
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	27.5	14.62	54.77	1027.24	806.79	71.31	14.62	54.77	1027.24	806.79	71.31
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	29.5	14.95	59.47	1050.66	825.19	77.03	14.95	59.47	1050.66	825.19	77.03
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	31.4	18.06	65.15	1769.53	1389.79	83.53	18.06	65.15	1769.53	1389.79	83.53
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	33.4	18.46	70.94	1808.12	1420.09	90.13	18.46	70.94	1808.12	1420.09	90.13
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	35.3	18.85	76.87	1846.71	1450.40	96.84	18.85	76.87	1846.71	1450.40	96.84
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	37.3	19.24	82.91	1885.30	1480.71	103.64	19.24	82.91	1885.30	1480.71	103.64
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	39.3	19.64	89.08	1923.89	1511.02	110.54	19.64	89.08	1923.89	1511.02	110.54
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	41.2	20.03	95.37	1962.48	1541.33	117.53	20.03	95.37	1962.48	1541.33	117.53
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	43.2	20.43	101.79	2001.07	1571.63	124.63	20.43	101.79	2001.07	1571.63	124.63

Breve termine

Lungo termine

Palo

4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	45.2	17.50	107.29	307.70	241.66	130.99	10.17	104.99	179.51	140.99	129.15
4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	47.1	17.50	112.79	309.53	243.10	137.35	10.34	108.23	182.55	143.37	133.71
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	49.1	17.50	118.29	311.36	244.54	143.72	10.51	111.54	185.59	145.76	138.32
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	51.1	17.50	123.78	313.19	245.98	150.08	10.68	114.89	188.63	148.15	142.96
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	53.0	17.50	129.28	315.03	247.42	156.44	10.85	118.30	191.67	150.54	147.66
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	55.0	17.50	134.78	316.86	248.86	162.80	11.03	121.77	194.71	152.92	152.39
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	56.9	18.59	140.62	1190.11	934.71	169.44	18.59	127.60	1190.11	934.71	159.03
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	58.9	18.91	146.56	1210.55	950.77	176.15	18.91	133.55	1210.55	950.77	165.74
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	60.9	19.23	152.60	1231.00	966.82	182.95	19.23	139.59	1231.00	966.82	172.54
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	62.8	19.55	158.74	1251.44	982.88	189.82	19.55	145.73	1251.44	982.88	179.41
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	64.8	19.87	164.98	1271.88	998.94	196.78	19.87	151.97	1271.88	998.94	186.37
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	66.8	20.19	171.32	1292.33	1014.99	203.82	20.19	158.31	1292.33	1014.99	193.41
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	68.7	20.50	177.76	1312.77	1031.05	210.93	20.50	164.75	1312.77	1031.05	200.52
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	70.7	20.82	184.31	1333.22	1047.11	218.13	20.82	171.29	1333.22	1047.11	207.72
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	72.6	21.14	190.95	1353.66	1063.16	225.41	21.14	177.94	1353.66	1063.16	215.00
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	74.6	21.46	197.69	1374.10	1079.22	232.77	21.46	184.68	1374.10	1079.22	222.36
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	76.6	21.70	204.51	428.04	336.18	240.18	13.13	188.80	231.78	182.04	227.62
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	78.5	21.70	211.33	429.88	337.62	247.60	13.30	192.98	234.82	184.42	232.92
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	80.5	21.70	218.14	431.71	339.06	255.02	13.47	197.21	237.86	186.81	238.27
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	82.5	21.70	224.96	433.54	340.50	262.44	13.64	201.50	240.90	189.20	243.66
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	84.4	21.70	231.78	435.38	341.94	269.85	13.81	205.84	243.93	191.59	249.10
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	86.4	21.70	238.60	437.21	343.38	277.27	13.99	210.23	246.97	193.97	254.58
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	88.4	21.70	245.41	439.04	344.82	284.69	14.16	214.68	250.01	196.36	260.10
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	90.3	21.70	252.23	440.87	346.26	292.11	14.33	219.18	253.05	198.75	265.67
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	92.3	21.70	259.05	442.71	347.70	299.52	14.50	223.74	256.09	201.13	271.27
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	94.2	21.70	265.86	444.54	349.14	306.94	14.67	228.35	259.13	203.52	276.93
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	96.2	21.70	272.68	446.37	350.58	314.36	14.85	233.01	262.17	205.91	282.62
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	98.2	21.70	279.50	448.21	352.02	321.77	15.02	237.73	265.21	208.30	288.36
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	100.1	21.70	286.32	450.04	353.46	329.19	15.19	242.50	268.25	210.68	294.14
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	102.1	21.70	293.13	451.87	354.90	336.61	15.36	247.33	271.29	213.07	299.96
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	104.1	21.70	299.95	453.71	356.34	344.03	15.54	252.21	274.33	215.46	305.83
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	106.0	21.70	306.77	455.54	357.78	351.44	15.71	257.14	277.37	217.84	311.74
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	108.0	21.70	313.59	457.37	359.22	358.86	15.88	262.13	280.41	220.23	317.70
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	110.0	21.70	320.40	459.20	360.66	366.28	16.05	267.18	283.45	222.62	323.70
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	111.9	21.70	327.22	461.04	362.10	373.70	16.22	272.27	286.48	225.00	329.74
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	113.9	21.70	334.04	462.87	363.54	381.11	16.40	277.42	289.52	227.39	335.82
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	115.8	32.54	344.26	2949.95	2316.89	391.25	32.54	287.65	2949.95	2316.89	345.96
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	117.8	32.92	354.60	2984.22	2343.80	401.49	32.92	297.99	2984.22	2343.80	356.20
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	119.8	33.30	365.06	3018.50	2370.72	411.82	33.30	308.45	3018.50	2370.72	366.53
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	121.7	33.68	375.64	3052.77	2397.64	422.25	33.68	319.03	3052.77	2397.64	376.96
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	123.7	34.05	386.34	3087.04	2424.56	432.77	34.05	329.73	3087.04	2424.56	387.48
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	125.7	34.43	397.16	3121.31	2451.47	443.39	34.43	340.54	3121.31	2451.47	398.10
8.5	6.5	8	0.70	0.50	0.79	35.40	35.92	127.6	34.81	408.10	3155.58	2478.39	454.10	34.81	351.48	3155.58	2478.39	408.81
8.6	6.6	8	0.70	0.50	0.79	35.40	35.92	129.6	35.19	419.15	3189.85	2505.31	464.91	35.19	362.54	3189.85	2505.31	419.62
8.7	6.7	8	0.70	0.50	0.79	35.40	35.92	131.6	35.57	430.32	3224.13	2532.22	475.81	35.57	373.71	3224.13	2532.22	430.52
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	133.5	21.70	437.14	482.12	378.65	483.23	18.30	379.46	323.19	253.83	437.09
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	135.5	21.70	443.96	483.95	380.09	490.65	18.47	385.26	326.23	256.22	443.69

9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	137.4	21.70	450.78	485.78	381.53	498.07	18.65	391.12	329.27	258.61	450.34
9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	139.4	21.70	457.59	487.62	382.97	505.48	18.82	397.03	332.31	260.99	457.03
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	141.4	21.70	464.41	489.45	384.41	512.90	18.99	403.00	335.35	263.38	463.77
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	143.3	21.70	471.23	491.28	385.85	520.32	19.16	409.02	338.39	265.77	470.55
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	145.3	21.70	478.04	493.12	387.29	527.73	19.34	415.09	341.43	268.16	477.37
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	147.3	21.70	484.86	494.95	388.73	535.15	19.51	421.22	344.47	270.54	484.24
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	149.2	21.70	491.68	496.78	390.17	542.57	19.68	427.40	347.51	272.93	491.15
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	151.2	21.70	498.50	498.62	391.61	549.99	19.85	433.64	350.54	275.32	498.10
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	153.2	21.70	505.31	500.45	393.05	557.40	20.02	439.93	353.58	277.70	505.10
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	155.1	21.70	512.13	502.28	394.49	564.82	20.20	446.28	356.62	280.09	512.14
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	157.1	21.70	518.95	504.11	395.93	572.24	20.37	452.68	359.66	282.48	519.22
10.1	8.1	9	0.62	0.50	0.40	19.00	3.56	159.0	21.70	525.77	505.95	397.37	579.66	20.54	459.13	362.46	284.67	526.35
10.2	8.2	9	0.62	0.50	0.40	19.00	3.56	161.0	21.70	532.58	507.78	398.81	587.07	20.71	465.63	365.24	286.86	533.51
10.3	8.3	9	0.62	0.50	0.40	19.00	3.56	163.0	21.70	539.40	509.61	400.25	594.49	20.88	472.20	368.03	289.05	540.73
10.4	8.4	9	0.62	0.50	0.40	19.00	3.56	164.9	21.70	546.22	511.45	401.69	601.91	21.06	478.81	370.80	291.23	547.98
10.5	8.5	9	0.62	0.50	0.40	19.00	3.56	166.9	21.70	553.03	513.28	403.13	609.32	21.23	485.48	373.57	293.41	555.28
10.6	8.6	10	0.70	0.50	0.73	33.10	27.91	168.9	38.66	565.18	2959.88	2324.69	621.01	38.66	497.63	2959.88	2324.69	566.96
10.7	8.7	10	0.70	0.50	0.73	33.10	27.90	170.8	39.01	577.44	2985.00	2344.42	632.77	39.01	509.88	2985.00	2344.42	578.73
10.8	8.8	10	0.70	0.50	0.73	33.10	27.89	172.8	39.36	589.80	3010.09	2364.12	644.63	39.36	522.25	3010.09	2364.12	590.58
10.9	8.9	11	0.70	0.50	0.86	37.70	45.19	174.8	46.83	604.51	4921.65	3865.46	658.36	46.83	536.96	4921.65	3865.46	604.32
11.0	9.0	11	0.70	0.50	0.86	37.70	45.17	176.7	47.24	619.36	4962.44	3897.50	672.20	47.24	551.80	4962.44	3897.50	618.16
11.1	9.1	11	0.70	0.50	0.86	37.70	45.15	178.7	47.65	634.33	5003.18	3929.49	686.14	47.65	566.77	5003.18	3929.49	632.10
11.2	9.2	11	0.70	0.50	0.86	37.70	45.13	180.6	48.07	649.43	5043.86	3961.44	700.18	48.07	581.87	5043.86	3961.44	646.14
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	48.48	664.66	5084.49	3993.35	714.33	48.48	597.10	5084.49	3993.35	660.29
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	48.89	680.01	5125.06	4025.22	728.58	48.89	612.46	5125.06	4025.22	674.54
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	49.30	695.50	5165.58	4057.04	742.93	49.30	627.95	5165.58	4057.04	688.89
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	49.71	711.12	5206.04	4088.81	757.39	49.71	643.56	5206.04	4088.81	703.35
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	50.12	726.86	5246.44	4120.55	771.95	50.12	659.31	5246.44	4120.55	717.90
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	50.53	742.74	5286.79	4152.23	786.61	50.53	675.18	5286.79	4152.23	732.57
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.94	758.74	5327.07	4183.87	801.38	50.94	691.18	5327.07	4183.87	747.33
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	51.35	774.87	5367.31	4215.47	816.24	51.35	707.31	5367.31	4215.47	762.20
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	51.76	791.13	5407.48	4247.02	831.22	51.76	723.57	5407.48	4247.02	777.17
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	52.17	807.52	5447.59	4278.53	846.29	52.17	739.96	5447.59	4278.53	792.25
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	52.58	824.04	5487.64	4309.99	861.47	52.58	756.48	5487.64	4309.99	807.43
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.99	840.68	5527.64	4341.40	876.75	52.99	773.13	5527.64	4341.40	822.71
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	53.40	857.46	5567.57	4372.76	892.13	53.40	789.90	5567.57	4372.76	838.09
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	53.81	874.36	5607.45	4404.08	907.62	53.81	806.81	5607.45	4404.08	853.58
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	54.22	891.40	5647.26	4435.35	923.21	54.22	823.84	5647.26	4435.35	869.17
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	54.63	908.56	5687.01	4466.57	938.91	54.63	841.01	5687.01	4466.57	884.86
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	55.04	925.85	5726.71	4497.74	954.70	55.04	858.30	5726.71	4497.74	900.66
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	55.45	943.27	5766.33	4528.87	970.60	55.45	875.72	5766.33	4528.87	916.56
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	55.86	960.82	5805.90	4559.94	986.60	55.86	893.27	5805.90	4559.94	932.56
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	56.27	978.50	5845.40	4590.97	1002.71	56.27	910.94	5845.40	4590.97	948.67
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	56.68	996.31	5884.84	4621.95	1018.92	56.68	928.75	5884.84	4621.95	964.88
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	57.09	1014.24	5924.22	4652.87	1035.23	57.09	946.69	5924.22	4652.87	981.19
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	57.50	1032.31	5963.53	4683.75	1051.65	57.50	964.75	5963.53	4683.75	997.60
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	57.91	1050.50	6002.78	4714.57	1068.17	57.91	982.94	6002.78	4714.57	1014.12

13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	58.32	1068.82	6041.97	4745.35	1084.79	58.32	1001.27	6041.97	4745.35	1030.74
13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	58.73	1087.27	6081.08	4776.07	1101.51	58.73	1019.72	6081.08	4776.07	1047.47
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	59.14	1105.85	6120.14	4806.74	1118.34	59.14	1038.30	6120.14	4806.74	1064.30
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	59.55	1124.56	6159.12	4837.36	1135.27	59.55	1057.01	6159.12	4837.36	1081.23
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.96	1143.40	6198.04	4867.93	1152.30	59.96	1075.85	6198.04	4867.93	1098.26
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	60.37	1162.37	6236.89	4898.44	1169.44	60.37	1094.81	6236.89	4898.44	1115.40
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	60.78	1181.46	6275.68	4928.91	1186.68	60.78	1113.91	6275.68	4928.91	1132.64
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	61.19	1200.69	6314.40	4959.31	1204.02	61.19	1133.13	6314.40	4959.31	1149.98
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	61.60	1220.04	6353.04	4989.67	1221.47	61.60	1152.49	6353.04	4989.67	1167.43
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	62.01	1239.53	6391.62	5019.97	1239.02	62.01	1171.97	6391.62	5019.97	1184.98
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.43	1259.14	6430.13	5050.22	1256.67	62.43	1191.58	6430.13	5050.22	1202.63
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.84	1278.88	6468.58	5080.41	1274.43	62.84	1211.32	6468.58	5080.41	1220.39
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	63.25	1298.75	6506.95	5110.54	1292.29	63.25	1231.19	6506.95	5110.54	1238.24
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.66	1318.74	6545.25	5140.62	1310.25	63.66	1251.19	6545.25	5140.62	1256.21
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	64.07	1338.87	6583.48	5170.65	1328.32	64.07	1271.32	6583.48	5170.65	1274.27
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.48	1359.13	6621.63	5200.62	1346.48	64.48	1291.57	6621.63	5200.62	1292.44
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.89	1379.51	6659.72	5230.53	1364.75	64.89	1311.96	6659.72	5230.53	1310.71
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	65.30	1400.03	6697.73	5260.39	1383.13	65.30	1332.47	6697.73	5260.39	1329.09
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.71	1420.67	6735.68	5290.19	1401.61	65.71	1353.11	6735.68	5290.19	1347.56
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	66.12	1441.44	6773.54	5319.93	1420.19	66.12	1373.89	6773.54	5319.93	1366.14
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.53	1462.34	6811.34	5349.61	1438.87	66.53	1394.79	6811.34	5349.61	1384.83
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.94	1483.37	6849.06	5379.24	1457.66	66.94	1415.81	6849.06	5379.24	1403.61
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	67.35	1504.53	6886.70	5408.81	1476.55	67.35	1436.97	6886.70	5408.81	1422.50
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.76	1525.81	6924.28	5438.31	1495.54	67.76	1458.26	6924.28	5438.31	1441.50
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	68.17	1547.23	6961.77	5467.76	1514.64	68.17	1479.68	6961.77	5467.76	1460.59
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.58	1568.78	6999.19	5497.15	1533.84	68.58	1501.22	6999.19	5497.15	1479.79
16.3	14.3	12	0.70	0.50	0.73	33.10	26.98	280.8	58.49	1587.15	4328.76	3399.80	1550.50	58.49	1519.60	4328.76	3399.80	1496.46
16.4	14.4	12	0.70	0.50	0.73	33.10	26.97	282.7	58.84	1605.63	4351.48	3417.65	1567.25	58.84	1538.08	4351.48	3417.65	1513.21
16.5	14.5	12	0.70	0.50	0.73	33.10	26.95	284.7	59.18	1624.23	4374.16	3435.46	1584.09	59.18	1556.67	4374.16	3435.46	1530.05
16.6	14.6	12	0.70	0.50	0.73	33.10	26.93	286.7	59.53	1642.93	4396.79	3453.23	1601.01	59.53	1575.38	4396.79	3453.23	1546.97
16.7	14.7	13	0.70	0.50	0.86	37.70	43.75	288.6	70.63	1665.12	7185.14	5643.19	1620.73	70.63	1597.57	7185.14	5643.19	1566.69
16.8	14.8	13	0.70	0.50	0.86	37.70	43.72	290.6	71.04	1687.44	7222.09	5672.22	1640.55	71.04	1619.88	7222.09	5672.22	1586.50
16.9	14.9	13	0.70	0.50	0.86	37.70	43.69	292.6	71.45	1709.89	7258.97	5701.18	1660.47	71.45	1642.33	7258.97	5701.18	1606.43
17.0	15.0	13	0.70	0.50	0.86	37.70	43.66	294.5	71.86	1732.46	7295.76	5730.08	1680.49	71.86	1664.91	7295.76	5730.08	1626.45

1.2.6.1.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1297	1254

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.70	32.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.70	31.95	24.55	1.3	10.29	2.59	722.74	363.29	3.32	10.29	2.59	722.74	363.29	3.32
2.2	0.2	3	0.70	0.50	0.70	31.95	24.55	2.5	10.62	5.25	746.16	375.06	6.72	10.62	5.25	746.16	375.06	6.72
2.3	0.3	3	0.70	0.50	0.70	31.95	24.55	3.8	10.95	8.01	769.58	386.83	10.18	10.95	8.01	769.58	386.83	10.18
2.4	0.4	3	0.70	0.50	0.70	31.95	24.55	5.0	11.29	10.84	793.01	398.61	13.70	11.29	10.84	793.01	398.61	13.70
2.5	0.5	3	0.70	0.50	0.70	31.95	24.55	6.3	11.62	13.76	816.43	410.38	17.29	11.62	13.76	816.43	410.38	17.29
2.6	0.6	3	0.70	0.50	0.70	31.95	24.55	7.5	11.95	16.77	839.85	422.16	20.95	11.95	16.77	839.85	422.16	20.95
2.7	0.7	3	0.70	0.50	0.70	31.95	24.55	8.8	12.29	19.86	863.28	433.93	24.68	12.29	19.86	863.28	433.93	24.68
2.8	0.8	3	0.70	0.50	0.70	31.95	24.55	10.1	12.62	23.03	886.70	445.70	28.48	12.62	23.03	886.70	445.70	28.48
2.9	0.9	3	0.70	0.50	0.70	31.95	24.55	11.3	12.95	26.28	910.12	457.48	32.34	12.95	26.28	910.12	457.48	32.34
3.0	1.0	3	0.70	0.50	0.70	31.95	24.55	12.6	13.29	29.62	933.55	469.25	36.26	13.29	29.62	933.55	469.25	36.26
3.1	1.1	3	0.70	0.50	0.70	31.95	24.55	13.8	13.62	33.05	956.97	481.03	40.26	13.62	33.05	956.97	481.03	40.26
3.2	1.2	3	0.70	0.50	0.70	31.95	24.55	15.1	13.95	36.55	980.39	492.80	44.32	13.95	36.55	980.39	492.80	44.32
3.3	1.3	3	0.70	0.50	0.70	31.95	24.55	16.3	14.29	40.14	1003.82	504.57	48.45	14.29	40.14	1003.82	504.57	48.45
3.4	1.4	3	0.70	0.50	0.70	31.95	24.55	17.6	14.62	43.82	1027.24	516.35	52.65	14.62	43.82	1027.24	516.35	52.65
3.5	1.5	3	0.70	0.50	0.70	31.95	24.55	18.8	14.95	47.58	1050.66	528.12	56.91	14.95	47.58	1050.66	528.12	56.91
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	20.1	18.06	52.12	1769.53	889.46	61.80	18.06	52.12	1769.53	889.46	61.80
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	21.4	18.46	56.76	1808.12	908.86	66.77	18.46	56.76	1808.12	908.86	66.77
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	22.6	18.85	61.49	1846.71	928.26	71.81	18.85	61.49	1846.71	928.26	71.81
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	23.9	19.24	66.33	1885.30	947.65	76.94	19.24	66.33	1885.30	947.65	76.94
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	25.1	19.64	71.27	1923.89	967.05	82.14	19.64	71.27	1923.89	967.05	82.14
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	26.4	20.03	76.30	1962.48	986.45	87.43	20.03	76.30	1962.48	986.45	87.43
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	27.6	20.43	81.43	2001.07	1005.85	92.79	20.43	81.43	2001.07	1005.85	92.79

Breve termine

Lungo termine

Palo

4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	28.9	17.50	85.83	307.70	154.66	97.57	10.17	83.99	179.51	90.23	96.09
4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	30.2	17.50	90.23	309.53	155.59	102.34	10.34	86.59	182.55	91.76	99.43
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	31.4	17.50	94.63	311.36	156.51	107.12	10.51	89.23	185.59	93.29	102.80
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	32.7	17.50	99.03	313.19	157.43	111.89	10.68	91.91	188.63	94.81	106.20
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	33.9	17.50	103.42	315.03	158.35	116.67	10.85	94.64	191.67	96.34	109.64
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	35.2	17.50	107.82	316.86	159.27	121.44	11.03	97.41	194.71	97.87	113.12
4.9	2.9	6	0.70	0.50	0.67	30.80	21.43	36.4	18.59	112.49	1190.11	598.21	126.44	18.59	102.08	1190.11	598.21	118.11
5.0	3.0	6	0.70	0.50	0.67	30.80	21.43	37.7	18.91	117.25	1210.55	608.49	131.50	18.91	106.84	1210.55	608.49	123.17
5.1	3.1	6	0.70	0.50	0.67	30.80	21.43	39.0	19.23	122.08	1231.00	618.77	136.62	19.23	111.67	1231.00	618.77	128.29
5.2	3.2	6	0.70	0.50	0.67	30.80	21.43	40.2	19.55	126.99	1251.44	629.04	141.81	19.55	116.58	1251.44	629.04	133.48
5.3	3.3	6	0.70	0.50	0.67	30.80	21.43	41.5	19.87	131.99	1271.88	639.32	147.06	19.87	121.57	1271.88	639.32	138.73
5.4	3.4	6	0.70	0.50	0.67	30.80	21.43	42.7	20.19	137.06	1292.33	649.59	152.37	20.19	126.65	1292.33	649.59	144.04
5.5	3.5	6	0.70	0.50	0.67	30.80	21.43	44.0	20.50	142.21	1312.77	659.87	157.75	20.50	131.80	1312.77	659.87	149.42
5.6	3.6	6	0.70	0.50	0.67	30.80	21.43	45.2	20.82	147.45	1333.22	670.15	163.20	20.82	137.03	1333.22	670.15	154.87
5.7	3.7	6	0.70	0.50	0.67	30.80	21.43	46.5	21.14	152.76	1353.66	680.42	168.70	21.14	142.35	1353.66	680.42	160.37
5.8	3.8	6	0.70	0.50	0.67	30.80	21.43	47.8	21.46	158.15	1374.10	690.70	174.28	21.46	147.74	1374.10	690.70	165.95
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	49.0	21.70	163.61	428.04	215.16	179.90	13.13	151.04	231.78	116.50	169.84
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	50.3	21.70	169.06	429.88	216.08	185.51	13.30	154.38	234.82	118.03	173.77
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	51.5	21.70	174.52	431.71	217.00	191.13	13.47	157.77	237.86	119.56	177.74
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	52.8	21.70	179.97	433.54	217.92	196.75	13.64	161.20	240.90	121.09	181.74
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	54.0	21.70	185.42	435.38	218.84	202.37	13.81	164.67	243.93	122.61	185.77
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	55.3	21.70	190.88	437.21	219.76	207.99	13.99	168.18	246.97	124.14	189.84
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	56.5	21.70	196.33	439.04	220.69	213.61	14.16	171.74	250.01	125.67	193.94
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	57.8	21.70	201.78	440.87	221.61	219.23	14.33	175.34	253.05	127.20	198.08
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	59.1	21.70	207.24	442.71	222.53	224.85	14.50	178.99	256.09	128.73	202.25
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	60.3	21.70	212.69	444.54	223.45	230.47	14.67	182.68	259.13	130.25	206.46
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	61.6	21.70	218.15	446.37	224.37	236.09	14.85	186.41	262.17	131.78	210.70
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	62.8	21.70	223.60	448.21	225.29	241.71	15.02	190.18	265.21	133.31	214.98
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	64.1	21.70	229.05	450.04	226.21	247.33	15.19	194.00	268.25	134.84	219.29
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	65.3	21.70	234.51	451.87	227.14	252.95	15.36	197.86	271.29	136.36	223.64
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	66.6	21.70	239.96	453.71	228.06	258.57	15.54	201.77	274.33	137.89	228.02
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	67.9	21.70	245.41	455.54	228.98	264.19	15.71	205.71	277.37	139.42	232.43
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	69.1	21.70	250.87	457.37	229.90	269.81	15.88	209.71	280.41	140.95	236.88
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	70.4	21.70	256.32	459.20	230.82	275.43	16.05	213.74	283.45	142.48	241.36
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	71.6	21.70	261.78	461.04	231.74	281.05	16.22	217.82	286.48	144.00	245.88
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	72.9	21.70	267.23	462.87	232.66	286.67	16.40	221.94	289.52	145.53	250.44
7.9	5.9	8	0.70	0.50	0.79	35.40	35.92	74.1	32.54	275.41	2949.95	1482.81	294.47	32.54	230.12	2949.95	1482.81	258.24
8.0	6.0	8	0.70	0.50	0.79	35.40	35.92	75.4	32.92	283.68	2984.22	1500.03	302.34	32.92	238.39	2984.22	1500.03	266.11
8.1	6.1	8	0.70	0.50	0.79	35.40	35.92	76.7	33.30	292.05	3018.50	1517.26	310.30	33.30	246.76	3018.50	1517.26	274.06
8.2	6.2	8	0.70	0.50	0.79	35.40	35.92	77.9	33.68	300.52	3052.77	1534.49	318.32	33.68	255.22	3052.77	1534.49	282.09
8.3	6.3	8	0.70	0.50	0.79	35.40	35.92	79.2	34.05	309.07	3087.04	1551.72	326.43	34.05	263.78	3087.04	1551.72	290.19
8.4	6.4	8	0.70	0.50	0.79	35.40	35.92	80.4	34.43	317.73	3121.31	1568.94	334.61	34.43	272.44	3121.31	1568.94	298.37
8.5	6.5	8	0.70	0.50	0.79	35.40	35.90	81.7	34.81	326.48	3153.75	1585.25	342.86	34.81	281.18	3153.75	1585.25	306.63
8.6	6.6	8	0.70	0.50	0.79	35.40	35.88	82.9	35.19	335.32	3186.14	1601.53	351.19	35.19	290.03	3186.14	1601.53	314.96
8.7	6.7	8	0.70	0.50	0.79	35.40	35.86	84.2	35.57	344.26	3218.48	1617.78	359.60	35.57	298.97	3218.48	1617.78	323.37
8.8	6.8	9	0.62	0.50	0.40	19.00	3.56	85.5	21.70	349.71	482.12	242.34	365.22	18.30	303.57	322.08	161.90	328.31
8.9	6.9	9	0.62	0.50	0.40	19.00	3.55	86.7	21.70	355.17	483.95	243.26	370.84	18.47	308.21	324.83	163.28	333.28

9.0	7.0	9	0.62	0.50	0.40	19.00	3.55	88.0	21.70	360.62	485.78	244.18	376.46	18.65	312.90	327.57	164.65	338.28
9.1	7.1	9	0.62	0.50	0.40	19.00	3.55	89.2	21.70	366.07	487.62	245.10	382.08	18.82	317.63	330.30	166.03	343.32
9.2	7.2	9	0.62	0.50	0.40	19.00	3.54	90.5	21.70	371.53	489.45	246.02	387.70	18.99	322.40	333.03	167.40	348.40
9.3	7.3	9	0.62	0.50	0.40	19.00	3.54	91.7	21.70	376.98	491.28	246.95	393.32	19.16	327.22	335.75	168.77	353.51
9.4	7.4	9	0.62	0.50	0.40	19.00	3.54	93.0	21.70	382.44	493.12	247.87	398.94	19.34	332.08	338.46	170.13	358.65
9.5	7.5	9	0.62	0.50	0.40	19.00	3.53	94.2	21.70	387.89	494.95	248.79	404.56	19.51	336.98	341.17	171.49	363.83
9.6	7.6	9	0.62	0.50	0.40	19.00	3.53	95.5	21.70	393.34	496.78	249.71	410.18	19.68	341.92	343.87	172.85	369.04
9.7	7.7	9	0.62	0.50	0.40	19.00	3.53	96.8	21.70	398.80	498.62	250.63	415.80	19.85	346.91	346.56	174.20	374.29
9.8	7.8	9	0.62	0.50	0.40	19.00	3.52	98.0	21.70	404.25	500.45	251.55	421.42	20.02	351.95	349.25	175.55	379.57
9.9	7.9	9	0.62	0.50	0.40	19.00	3.52	99.3	21.70	409.70	502.28	252.47	427.04	20.20	357.02	351.93	176.90	384.89
10.0	8.0	9	0.62	0.50	0.40	19.00	3.52	100.5	21.70	415.16	504.11	253.40	432.66	20.37	362.14	354.60	178.24	390.24
10.1	8.1	9	0.62	0.50	0.40	19.00	3.51	101.8	21.70	420.61	505.95	254.32	438.28	20.54	367.30	357.27	179.58	395.63
10.2	8.2	9	0.62	0.50	0.40	19.00	3.51	103.0	21.70	426.07	507.78	255.24	443.90	20.71	372.51	359.92	180.92	401.05
10.3	8.3	9	0.62	0.50	0.40	19.00	3.51	104.3	21.70	431.52	509.61	256.16	449.52	20.88	377.76	362.58	182.25	406.51
10.4	8.4	9	0.62	0.50	0.40	19.00	3.50	105.6	21.70	436.97	511.45	257.08	455.14	21.06	383.05	365.22	183.58	412.00
10.5	8.5	9	0.62	0.50	0.40	19.00	3.50	106.8	21.70	442.43	513.28	258.00	460.76	21.23	388.38	367.86	184.90	417.52
10.6	8.6	10	0.70	0.50	0.73	33.10	27.59	108.1	38.66	452.14	2925.98	1470.76	469.79	38.66	398.10	2925.98	1470.76	426.55
10.7	8.7	10	0.70	0.50	0.73	33.10	27.57	109.3	39.01	461.95	2950.19	1482.93	478.89	39.01	407.91	2950.19	1482.93	435.65
10.8	8.8	10	0.70	0.50	0.73	33.10	27.55	110.6	39.36	471.84	2974.36	1495.08	488.06	39.36	417.80	2974.36	1495.08	444.82
10.9	8.9	11	0.70	0.50	0.86	37.70	44.69	111.8	46.83	483.61	4867.10	2446.47	498.73	46.83	429.57	4867.10	2446.47	455.49
11.0	9.0	11	0.70	0.50	0.86	37.70	44.66	113.1	47.24	495.49	4906.44	2466.24	509.49	47.24	441.44	4906.44	2466.24	466.25
11.1	9.1	11	0.70	0.50	0.86	37.70	44.63	114.4	47.65	507.46	4945.69	2485.98	520.32	47.65	453.42	4945.69	2485.98	477.09
11.2	9.2	11	0.70	0.50	0.86	37.70	44.60	115.6	48.07	519.54	4984.87	2505.67	531.24	48.07	465.50	4984.87	2505.67	488.01
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	48.48	531.73	5023.96	2525.32	542.25	48.48	477.68	5023.96	2525.32	499.01
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	48.89	544.01	5062.97	2544.93	553.33	48.89	489.97	5062.97	2544.93	510.10
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	49.30	556.40	5101.90	2564.49	564.50	49.30	502.36	5101.90	2564.49	521.27
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	49.71	568.89	5140.74	2584.02	575.75	49.71	514.85	5140.74	2584.02	532.52
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	50.12	581.49	5179.50	2603.50	587.09	50.12	527.45	5179.50	2603.50	543.85
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	50.53	594.19	5218.18	2622.94	598.50	50.53	540.14	5218.18	2622.94	555.27
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.94	606.99	5256.76	2642.34	610.00	50.94	552.95	5256.76	2642.34	566.76
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	51.35	619.90	5295.27	2661.69	621.58	51.35	565.85	5295.27	2661.69	578.35
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	51.76	632.90	5333.68	2681.00	633.24	51.76	578.86	5333.68	2681.00	590.01
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	52.17	646.01	5372.01	2700.27	644.99	52.17	591.97	5372.01	2700.27	601.75
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	52.58	659.23	5410.25	2719.49	656.82	52.58	605.19	5410.25	2719.49	613.58
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.99	672.55	5448.40	2738.67	668.73	52.99	618.50	5448.40	2738.67	625.49
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	53.40	685.97	5486.46	2757.80	680.72	53.40	631.92	5486.46	2757.80	637.49
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	53.81	699.49	5524.43	2776.88	692.80	53.81	645.45	5524.43	2776.88	649.56
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	54.22	713.12	5562.31	2795.92	704.95	54.22	659.07	5562.31	2795.92	661.72
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	54.63	726.85	5600.10	2814.92	717.20	54.63	672.80	5600.10	2814.92	673.96
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	55.04	740.68	5637.80	2833.87	729.52	55.04	686.64	5637.80	2833.87	686.28
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	55.45	754.62	5675.40	2852.77	741.92	55.45	700.57	5675.40	2852.77	698.69
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	55.86	768.66	5712.91	2871.62	754.41	55.86	714.61	5712.91	2871.62	711.18
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	56.27	782.80	5750.32	2890.43	766.98	56.27	728.76	5750.32	2890.43	723.75
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	56.68	797.04	5787.64	2909.18	779.64	56.68	743.00	5787.64	2909.18	736.40
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	57.09	811.39	5824.86	2927.89	792.37	57.09	757.35	5824.86	2927.89	749.14
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	57.50	825.84	5861.99	2946.56	805.19	57.50	771.80	5861.99	2946.56	761.95
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	57.91	840.40	5899.01	2965.17	818.09	57.91	786.36	5899.01	2965.17	774.85

13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	58.32	855.06	5935.94	2983.73	831.07	58.32	801.01	5935.94	2983.73	787.84
13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	58.73	869.82	5972.78	3002.24	844.14	58.73	815.78	5972.78	3002.24	800.90
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	59.14	884.68	6009.51	3020.71	857.29	59.14	830.64	6009.51	3020.71	814.05
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	59.55	899.65	6046.14	3039.12	870.52	59.55	845.61	6046.14	3039.12	827.28
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.96	914.72	6082.67	3057.48	883.83	59.96	860.68	6082.67	3057.48	840.59
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	60.37	929.89	6119.10	3075.79	897.23	60.37	875.85	6119.10	3075.79	853.99
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	60.78	945.17	6155.42	3094.05	910.70	60.78	891.13	6155.42	3094.05	867.47
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	61.19	960.55	6191.64	3112.26	924.26	61.19	906.51	6191.64	3112.26	881.03
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	61.60	976.03	6227.76	3130.41	937.91	61.60	921.99	6227.76	3130.41	894.67
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	62.01	991.62	6263.77	3148.52	951.63	62.01	937.58	6263.77	3148.52	908.40
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.43	1007.31	6299.68	3166.57	965.44	62.43	953.27	6299.68	3166.57	922.21
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.84	1023.10	6335.48	3184.56	979.33	62.84	969.06	6335.48	3184.56	936.10
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	63.25	1039.00	6373.56	3203.70	993.30	63.25	984.95	6373.56	3203.70	950.07
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.66	1055.00	6411.59	3222.82	1007.36	63.66	1000.95	6411.59	3222.82	964.12
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	64.07	1071.10	6449.58	3241.91	1021.50	64.07	1017.05	6449.58	3241.91	978.26
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.48	1087.30	6487.53	3260.99	1035.72	64.48	1033.26	6487.53	3260.99	992.48
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.89	1103.61	6525.44	3280.04	1050.02	64.89	1049.57	6525.44	3280.04	1006.79
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	65.30	1120.02	6563.30	3299.08	1064.41	65.30	1065.98	6563.30	3299.08	1021.17
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.71	1136.53	6601.13	3318.09	1078.87	65.71	1082.49	6601.13	3318.09	1035.64
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	66.12	1153.15	6638.92	3337.08	1093.42	66.12	1099.11	6638.92	3337.08	1050.19
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.53	1169.87	6676.66	3356.06	1108.06	66.53	1115.83	6676.66	3356.06	1064.82
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.94	1186.70	6714.37	3375.01	1122.77	66.94	1132.65	6714.37	3375.01	1079.54
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	67.35	1203.62	6752.03	3393.94	1137.57	67.35	1149.58	6752.03	3393.94	1094.34
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.76	1220.65	6789.65	3412.85	1152.45	67.76	1166.61	6789.65	3412.85	1109.22
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	68.17	1237.78	6827.24	3431.74	1167.41	68.17	1183.74	6827.24	3431.74	1124.18
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.58	1255.02	6864.78	3450.61	1182.46	68.58	1200.98	6864.78	3450.61	1139.22
16.3	14.3	12	0.70	0.50	0.73	33.10	26.46	179.7	58.49	1269.72	4244.15	2133.34	1195.48	58.49	1215.68	4244.15	2133.34	1152.24
16.4	14.4	12	0.70	0.50	0.73	33.10	26.44	181.0	58.84	1284.51	4267.27	2144.96	1208.56	58.84	1230.46	4267.27	2144.96	1165.33
16.5	14.5	12	0.70	0.50	0.73	33.10	26.43	182.2	59.18	1299.38	4290.36	2156.57	1221.72	59.18	1245.34	4290.36	2156.57	1178.48
16.6	14.6	12	0.70	0.50	0.73	33.10	26.42	183.5	59.53	1314.34	4313.43	2168.17	1234.94	59.53	1260.30	4313.43	2168.17	1191.71
16.7	14.7	13	0.70	0.50	0.86	37.70	42.94	184.7	70.63	1332.10	7051.88	3544.66	1250.40	70.63	1278.05	7051.88	3544.66	1207.17
16.8	14.8	13	0.70	0.50	0.86	37.70	42.92	186.0	71.04	1349.95	7089.17	3563.41	1265.94	71.04	1295.91	7089.17	3563.41	1222.71
16.9	14.9	13	0.70	0.50	0.86	37.70	42.89	187.2	71.45	1367.91	7126.43	3582.14	1281.57	71.45	1313.86	7126.43	3582.14	1238.33
17.0	15.0	13	0.70	0.50	0.86	37.70	42.87	188.5	71.86	1385.97	7163.65	3600.84	1297.27	71.86	1331.93	7163.65	3600.84	1254.04

1.2.6.2 Condizioni sismiche

Modello geotecnico di sottosuolo

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	ϕ' (°)	c_u (kPa)	α	k	tan δ
1	**0.0**	**1.6**	**19.35**			0.70	0.50	0.00
2	**1.6**	**2.0**	**18.33**	**22**	**35**	0.62	0.50	0.40
3	**2.0**	**3.5**	**19.35**			0.70	0.50	0.00
4	**3.5**	**4.2**	**19.35**	**40**		0.70	0.50	0.83
5	**4.2**	**4.8**	**18.33**	**22**	**25**	0.70	0.50	0.40
6	**4.8**	**5.8**	**19.35**			0.70	0.50	0.00
7	**5.8**	**7.8**	**18.33**	**22**	**35**	0.62	0.50	0.40
8	**7.8**	**8.7**	**19.35**			0.70	0.50	0.00
9	**8.7**	**10.5**	**18.33**	**22**	**35**	0.62	0.50	0.40
10	**10.5**	**10.8**	**19.35**			0.70	0.50	0.00
11	**10.8**	**16.2**	**19.35**	**41**		0.70	0.50	0.86
12	**16.2**	**16.6**	**19.35**			0.70	0.50	0.00
13	**16.6**	**18.7**	**19.35**	**41**		0.70	0.50	0.86
14	**18.7**	**18.9**	**19.35**			0.70	0.50	0.00
15	**18.9**	**21.2**	**19.35**	**41**		0.70	0.50	0.86
16	**21.2**	**22.3**	**19.35**			0.70	0.50	0.00
17	**22.3**	**23.3**	**19.35**	**41**		0.70	0.50	0.86
18	**23.3**	**23.6**	**19.35**			0.70	0.50	0.00
19	**23.6**	**23.8**	**19.35**	**41**		0.70	0.50	0.86
20	**23.8**	**25.0**	**19.35**			0.70	0.50	0.00

1.2.6.2.1 Palo di diametro d=1.2m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.2**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1771	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.8	0.00	0.00	0.00	0.00	2.83
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	5.7	0.00	0.00	0.00	0.00	5.65
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	8.5	0.00	0.00	0.00	0.00	8.48
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	14.1	0.00	0.00	0.00	0.00	14.14
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	17.0	0.00	0.00	0.00	0.00	16.96
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	19.8	0.00	0.00	0.00	0.00	19.79
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	22.6	0.00	0.00	0.00	0.00	22.62
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	25.4	0.00	0.00	0.00	0.00	25.45
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	28.3	0.00	0.00	0.00	0.00	28.27
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	31.1	0.00	0.00	0.00	0.00	31.10
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	33.9	0.00	0.00	0.00	0.00	33.93
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	36.8	0.00	0.00	0.00	0.00	36.76
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	39.6	0.00	0.00	0.00	0.00	39.58
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	42.4	0.00	0.00	0.00	0.00	42.41
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	45.2	18.06	6.81	1769.53	2001.29	50.69
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	48.1	18.46	13.77	1808.12	2044.93	59.08
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	50.9	18.85	20.87	1846.71	2088.58	67.59
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	53.7	19.24	28.13	1885.30	2132.22	76.22
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	56.5	19.64	35.53	1923.89	2175.87	84.97
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	59.4	20.03	43.08	1962.48	2219.51	93.84
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	62.2	20.43	50.79	2001.07	2263.15	102.83
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	65.0	17.50	57.38	307.70	347.99	110.94

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	67.9	17.50	63.98	309.53	350.07	119.04
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	70.7	17.50	70.58	311.36	352.14	127.15
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	73.5	17.50	77.17	313.19	354.21	135.25
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	76.3	17.50	83.77	315.03	356.29	143.36
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	79.2	17.50	90.37	316.86	358.36	151.46
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	82.0	0.00	90.37	0.00	0.00	154.29
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	84.8	0.00	90.37	0.00	0.00	157.12
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	87.7	0.00	90.37	0.00	0.00	159.95
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	90.5	0.00	90.37	0.00	0.00	162.77
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	93.3	0.00	90.37	0.00	0.00	165.60
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	96.1	0.00	90.37	0.00	0.00	168.43
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	99.0	0.00	90.37	0.00	0.00	171.26
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	101.8	0.00	90.37	0.00	0.00	174.08
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	104.6	0.00	90.37	0.00	0.00	176.91
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	107.4	0.00	90.37	0.00	0.00	179.74
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	110.3	21.70	98.55	428.04	484.11	189.11
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	113.1	21.70	106.73	429.88	486.18	198.48
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	115.9	21.70	114.91	431.71	488.25	207.85
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	118.8	21.70	123.09	433.54	490.32	217.23
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	121.6	21.70	131.27	435.38	492.40	226.60
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	124.4	21.70	139.45	437.21	494.47	235.97
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	127.2	21.70	147.63	439.04	496.54	245.34
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	130.1	21.70	155.81	440.87	498.62	254.71
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	132.9	21.70	164.00	442.71	500.69	264.09
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	135.7	21.70	172.18	444.54	502.76	273.46
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	138.5	21.70	180.36	446.37	504.84	282.83
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	141.4	21.70	188.54	448.21	506.91	292.20
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	144.2	21.70	196.72	450.04	508.98	301.57
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	147.0	21.70	204.90	451.87	511.06	310.95
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	149.9	21.70	213.08	453.71	513.13	320.32
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	152.7	21.70	221.26	455.54	515.20	329.69
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	155.5	21.70	229.44	457.37	517.27	339.06
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	158.3	21.70	237.62	459.20	519.35	348.43
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	161.2	21.70	245.80	461.04	521.42	357.81
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	164.0	21.70	253.98	462.87	523.49	367.18
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	166.8	0.00	253.98	0.00	0.00	370.01
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	169.6	0.00	253.98	0.00	0.00	372.83
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	172.5	0.00	253.98	0.00	0.00	375.66
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	175.3	0.00	253.98	0.00	0.00	378.49
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	178.1	0.00	253.98	0.00	0.00	381.31
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	181.0	0.00	253.98	0.00	0.00	384.14
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	183.8	0.00	253.98	0.00	0.00	386.97
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	186.6	0.00	253.98	0.00	0.00	389.80
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	189.4	0.00	253.98	0.00	0.00	392.62
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	192.3	21.70	262.16	482.12	545.26	402.00
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	195.1	21.70	270.34	483.95	547.34	411.37
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	197.9	21.70	278.53	485.78	549.41	420.74

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	200.7	21.70	286.71	487.62	551.48	430.11
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	203.6	21.70	294.89	489.45	553.55	439.48
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	206.4	21.70	303.07	491.28	555.63	448.86
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	209.2	21.70	311.25	493.12	557.70	458.23
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	212.1	21.70	319.43	494.95	559.77	467.60
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	214.9	21.70	327.61	496.78	561.85	476.97
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	217.7	21.70	335.79	498.62	563.92	486.34
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	220.5	21.70	343.97	500.45	565.99	495.72
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	223.4	21.70	352.15	502.28	568.07	505.09
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	226.2	21.70	360.33	504.11	570.14	514.46
10.1	8.1	9	0.62	0.50	0.40	19.00	3.57	229.0	21.70	368.51	505.95	572.21	523.83
10.2	8.2	9	0.62	0.50	0.40	19.00	3.57	231.8	21.70	376.69	507.78	574.29	533.20
10.3	8.3	9	0.62	0.50	0.40	19.00	3.57	234.7	21.70	384.87	509.61	576.36	542.58
10.4	8.4	9	0.62	0.50	0.40	19.00	3.57	237.5	21.70	393.06	511.45	578.43	551.95
10.5	8.5	9	0.62	0.50	0.40	19.00	3.57	240.3	21.70	401.24	513.28	580.50	561.32
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	243.2	0.00	401.24	0.00	0.00	564.15
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	246.0	0.00	401.24	0.00	0.00	566.98
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	248.8	0.00	401.24	0.00	0.00	569.80
10.9	8.9	11	0.70	0.50	0.86	37.70	45.38	251.6	46.83	418.89	4941.77	5589.02	586.76
11.0	9.0	11	0.70	0.50	0.86	37.70	45.38	254.5	47.24	436.70	4985.07	5637.98	603.83
11.1	9.1	11	0.70	0.50	0.86	37.70	45.38	257.3	47.65	454.67	5028.36	5686.94	621.03
11.2	9.2	11	0.70	0.50	0.86	37.70	45.38	260.1	48.07	472.79	5071.65	5735.90	638.35
11.3	9.3	11	0.70	0.50	0.86	37.70	45.38	263.0	48.48	491.06	5114.94	5784.86	655.80
11.4	9.4	11	0.70	0.50	0.86	37.70	45.38	265.8	48.89	509.49	5158.23	5833.82	673.37
11.5	9.5	11	0.70	0.50	0.86	37.70	45.38	268.6	49.30	528.08	5201.52	5882.79	691.07
11.6	9.6	11	0.70	0.50	0.86	37.70	45.38	271.4	49.71	546.82	5244.82	5931.75	708.89
11.7	9.7	11	0.70	0.50	0.86	37.70	45.36	274.3	50.12	565.71	5286.16	5978.51	726.83
11.8	9.8	11	0.70	0.50	0.86	37.70	45.35	277.1	50.53	584.76	5327.47	6025.22	744.89
11.9	9.9	11	0.70	0.50	0.86	37.70	45.33	279.9	50.94	603.96	5368.73	6071.89	763.08
12.0	10.0	11	0.70	0.50	0.86	37.70	45.31	282.7	51.35	623.32	5409.95	6118.51	781.40
12.1	10.1	11	0.70	0.50	0.86	37.70	45.29	285.6	51.76	642.83	5451.13	6165.08	799.84
12.2	10.2	11	0.70	0.50	0.86	37.70	45.28	288.4	52.17	662.50	5492.26	6211.61	818.40
12.3	10.3	11	0.70	0.50	0.86	37.70	45.26	291.2	52.58	682.32	5533.36	6258.08	837.08
12.4	10.4	11	0.70	0.50	0.86	37.70	45.24	294.1	52.99	702.30	5574.40	6304.50	855.89
12.5	10.5	11	0.70	0.50	0.86	37.70	45.23	296.9	53.40	722.43	5615.41	6350.88	874.82
12.6	10.6	11	0.70	0.50	0.86	37.70	45.21	299.7	53.81	742.71	5656.37	6397.20	893.88
12.7	10.7	11	0.70	0.50	0.86	37.70	45.19	302.5	54.22	763.15	5697.29	6443.48	913.06
12.8	10.8	11	0.70	0.50	0.86	37.70	45.17	305.4	54.63	783.75	5738.16	6489.70	932.36
12.9	10.9	11	0.70	0.50	0.86	37.70	45.16	308.2	55.04	804.50	5778.98	6535.88	951.79
13.0	11.0	11	0.70	0.50	0.86	37.70	45.14	311.0	55.45	825.40	5819.77	6582.00	971.34
13.1	11.1	11	0.70	0.50	0.86	37.70	45.12	313.8	55.86	846.46	5860.50	6628.07	991.01
13.2	11.2	11	0.70	0.50	0.86	37.70	45.10	316.7	56.27	867.67	5901.19	6674.09	1010.81
13.3	11.3	11	0.70	0.50	0.86	37.70	45.08	319.5	56.68	889.04	5941.84	6720.06	1030.73
13.4	11.4	11	0.70	0.50	0.86	37.70	45.07	322.3	57.09	910.56	5982.43	6765.97	1050.78
13.5	11.5	11	0.70	0.50	0.86	37.70	45.05	325.2	57.50	932.24	6022.99	6811.84	1070.95
13.6	11.6	11	0.70	0.50	0.86	37.70	45.03	328.0	57.91	954.07	6063.49	6857.65	1091.24
13.7	11.7	11	0.70	0.50	0.86	37.70	45.01	330.8	58.32	976.06	6103.95	6903.40	1111.66

13.8	11.8	11	0.70	0.50	0.86	37.70	44.99	333.6	58.73	998.20	6144.36	6949.11	1132.20
13.9	11.9	11	0.70	0.50	0.86	37.70	44.97	336.5	59.14	1020.50	6184.72	6994.76	1152.86
14.0	12.0	11	0.70	0.50	0.86	37.70	44.95	339.3	59.55	1042.95	6225.04	7040.35	1173.65
14.1	12.1	11	0.70	0.50	0.86	37.70	44.94	342.1	59.96	1065.56	6265.31	7085.89	1194.56
14.2	12.2	11	0.70	0.50	0.86	37.70	44.92	344.9	60.37	1088.32	6305.52	7131.38	1215.60
14.3	12.3	11	0.70	0.50	0.86	37.70	44.90	347.8	60.78	1111.23	6345.69	7176.81	1236.76
14.4	12.4	11	0.70	0.50	0.86	37.70	44.88	350.6	61.19	1134.30	6385.81	7222.19	1258.04
14.5	12.5	11	0.70	0.50	0.86	37.70	44.86	353.4	61.60	1157.53	6425.89	7267.51	1279.45
14.6	12.6	11	0.70	0.50	0.86	37.70	44.84	356.3	62.01	1180.91	6465.91	7312.77	1300.98
14.7	12.7	11	0.70	0.50	0.86	37.70	44.82	359.1	62.43	1204.44	6505.88	7357.98	1322.64
14.8	12.8	11	0.70	0.50	0.86	37.70	44.80	361.9	62.84	1228.13	6545.80	7403.13	1344.41
14.9	12.9	11	0.70	0.50	0.86	37.70	44.78	364.7	63.25	1251.97	6585.67	7448.22	1366.32
15.0	13.0	11	0.70	0.50	0.86	37.70	44.76	367.6	63.66	1275.97	6625.49	7493.26	1388.34
15.1	13.1	11	0.70	0.50	0.86	37.70	44.74	370.4	64.07	1300.12	6665.26	7538.24	1410.49
15.2	13.2	11	0.70	0.50	0.86	37.70	44.72	373.2	64.48	1324.43	6704.98	7583.16	1432.76
15.3	13.3	11	0.70	0.50	0.86	37.70	44.70	376.0	64.89	1348.89	6744.65	7628.02	1455.16
15.4	13.4	11	0.70	0.50	0.86	37.70	44.68	378.9	65.30	1373.51	6784.27	7672.82	1477.68
15.5	13.5	11	0.70	0.50	0.86	37.70	44.66	381.7	65.71	1398.28	6823.83	7717.57	1500.33
15.6	13.6	11	0.70	0.50	0.86	37.70	44.64	384.5	66.12	1423.20	6863.34	7762.25	1523.09
15.7	13.7	11	0.70	0.50	0.86	37.70	44.62	387.4	66.53	1448.28	6902.80	7806.88	1545.99
15.8	13.8	11	0.70	0.50	0.86	37.70	44.60	390.2	66.94	1473.52	6942.20	7851.45	1569.00
15.9	13.9	11	0.70	0.50	0.86	37.70	44.58	393.0	67.35	1498.91	6981.55	7895.95	1592.14
16.0	14.0	11	0.70	0.50	0.86	37.70	44.56	395.8	67.76	1524.45	7020.85	7940.40	1615.40
16.1	14.1	11	0.70	0.50	0.86	37.70	44.54	398.7	68.17	1550.15	7060.10	7984.78	1638.79
16.2	14.2	11	0.70	0.50	0.86	37.70	44.52	401.5	68.58	1576.01	7099.29	8029.10	1662.30
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	404.3	0.00	1576.01	0.00	0.00	1665.13
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	407.2	0.00	1576.01	0.00	0.00	1667.96
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	410.0	0.00	1576.01	0.00	0.00	1670.78
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	412.8	0.00	1576.01	0.00	0.00	1673.61
16.7	14.7	13	0.70	0.50	0.86	37.70	44.42	415.6	70.63	1602.63	7294.41	8249.79	1697.74
16.8	14.8	13	0.70	0.50	0.86	37.70	44.39	418.5	71.04	1629.42	7333.27	8293.73	1721.99
16.9	14.9	13	0.70	0.50	0.86	37.70	44.37	421.3	71.45	1656.35	7372.07	8337.62	1746.37
17.0	15.0	13	0.70	0.50	0.86	37.70	44.35	424.1	71.86	1683.44	7410.82	8381.44	1770.87

1.2.6.2.2 Palo di diametro d=1.0m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**1.0**	VERO
A_{palo} (m^2)	0.8	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica

L (m)	R_d - breve termine	R_d - lungo termine
15	1417	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	2.0	0.00	0.00	0.00	0.00	1.96
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	3.9	0.00	0.00	0.00	0.00	3.93
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	5.9	0.00	0.00	0.00	0.00	5.89
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	7.9	0.00	0.00	0.00	0.00	7.85
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	9.8	0.00	0.00	0.00	0.00	9.82
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	11.8	0.00	0.00	0.00	0.00	11.78
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	13.7	0.00	0.00	0.00	0.00	13.74
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	15.7	0.00	0.00	0.00	0.00	15.71
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	17.7	0.00	0.00	0.00	0.00	17.67
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	19.6	0.00	0.00	0.00	0.00	19.63
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	21.6	0.00	0.00	0.00	0.00	21.60
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	23.6	0.00	0.00	0.00	0.00	23.56
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	25.5	0.00	0.00	0.00	0.00	25.53
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	27.5	0.00	0.00	0.00	0.00	27.49
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	29.5	0.00	0.00	0.00	0.00	29.45
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	31.4	18.06	5.67	1769.53	1389.79	35.96
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	33.4	18.46	11.47	1808.12	1420.09	42.56
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	35.3	18.85	17.40	1846.71	1450.40	49.26
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	37.3	19.24	23.44	1885.30	1480.71	56.06
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	39.3	19.64	29.61	1923.89	1511.02	62.96
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	41.2	20.03	35.90	1962.48	1541.33	69.96
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	43.2	20.43	42.32	2001.07	1571.63	77.05
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	45.2	17.50	47.82	307.70	241.66	83.42

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	47.1	17.50	53.32	309.53	243.10	89.78
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	49.1	17.50	58.81	311.36	244.54	96.14
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	51.1	17.50	64.31	313.19	245.98	102.50
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	53.0	17.50	69.81	315.03	247.42	108.86
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	55.0	17.50	75.31	316.86	248.86	115.22
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	56.9	0.00	75.31	0.00	0.00	117.19
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	58.9	0.00	75.31	0.00	0.00	119.15
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	60.9	0.00	75.31	0.00	0.00	121.11
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	62.8	0.00	75.31	0.00	0.00	123.08
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	64.8	0.00	75.31	0.00	0.00	125.04
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	66.8	0.00	75.31	0.00	0.00	127.00
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	68.7	0.00	75.31	0.00	0.00	128.97
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	70.7	0.00	75.31	0.00	0.00	130.93
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	72.6	0.00	75.31	0.00	0.00	132.90
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	74.6	0.00	75.31	0.00	0.00	134.86
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	76.6	21.70	82.12	428.04	336.18	142.28
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	78.5	21.70	88.94	429.88	337.62	149.69
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	80.5	21.70	95.76	431.71	339.06	157.11
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	82.5	21.70	102.58	433.54	340.50	164.53
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	84.4	21.70	109.39	435.38	341.94	171.95
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	86.4	21.70	116.21	437.21	343.38	179.36
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	88.4	21.70	123.03	439.04	344.82	186.78
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	90.3	21.70	129.85	440.87	346.26	194.20
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	92.3	21.70	136.66	442.71	347.70	201.61
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	94.2	21.70	143.48	444.54	349.14	209.03
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	96.2	21.70	150.30	446.37	350.58	216.45
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	98.2	21.70	157.11	448.21	352.02	223.87
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	100.1	21.70	163.93	450.04	353.46	231.28
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	102.1	21.70	170.75	451.87	354.90	238.70
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	104.1	21.70	177.57	453.71	356.34	246.12
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	106.0	21.70	184.38	455.54	357.78	253.54
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	108.0	21.70	191.20	457.37	359.22	260.95
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	110.0	21.70	198.02	459.20	360.66	268.37
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	111.9	21.70	204.84	461.04	362.10	275.79
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	113.9	21.70	211.65	462.87	363.54	283.20
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	115.8	0.00	211.65	0.00	0.00	285.17
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	117.8	0.00	211.65	0.00	0.00	287.13
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	119.8	0.00	211.65	0.00	0.00	289.10
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	121.7	0.00	211.65	0.00	0.00	291.06
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	123.7	0.00	211.65	0.00	0.00	293.02
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	125.7	0.00	211.65	0.00	0.00	294.99
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	127.6	0.00	211.65	0.00	0.00	296.95
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	129.6	0.00	211.65	0.00	0.00	298.91
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	131.6	0.00	211.65	0.00	0.00	300.88
8.8	6.8	9	0.62	0.50	0.40	19.00	3.57	133.5	21.70	218.47	482.12	378.65	308.29
8.9	6.9	9	0.62	0.50	0.40	19.00	3.57	135.5	21.70	225.29	483.95	380.09	315.71
9.0	7.0	9	0.62	0.50	0.40	19.00	3.57	137.4	21.70	232.10	485.78	381.53	323.13

9.1	7.1	9	0.62	0.50	0.40	19.00	3.57	139.4	21.70	238.92	487.62	382.97	330.55
9.2	7.2	9	0.62	0.50	0.40	19.00	3.57	141.4	21.70	245.74	489.45	384.41	337.96
9.3	7.3	9	0.62	0.50	0.40	19.00	3.57	143.3	21.70	252.56	491.28	385.85	345.38
9.4	7.4	9	0.62	0.50	0.40	19.00	3.57	145.3	21.70	259.37	493.12	387.29	352.80
9.5	7.5	9	0.62	0.50	0.40	19.00	3.57	147.3	21.70	266.19	494.95	388.73	360.21
9.6	7.6	9	0.62	0.50	0.40	19.00	3.57	149.2	21.70	273.01	496.78	390.17	367.63
9.7	7.7	9	0.62	0.50	0.40	19.00	3.57	151.2	21.70	279.83	498.62	391.61	375.05
9.8	7.8	9	0.62	0.50	0.40	19.00	3.57	153.2	21.70	286.64	500.45	393.05	382.47
9.9	7.9	9	0.62	0.50	0.40	19.00	3.57	155.1	21.70	293.46	502.28	394.49	389.88
10.0	8.0	9	0.62	0.50	0.40	19.00	3.57	157.1	21.70	300.28	504.11	395.93	397.30
10.1	8.1	9	0.62	0.50	0.40	19.00	3.56	159.0	21.70	307.09	505.95	397.37	404.72
10.2	8.2	9	0.62	0.50	0.40	19.00	3.56	161.0	21.70	313.91	507.78	398.81	412.14
10.3	8.3	9	0.62	0.50	0.40	19.00	3.56	163.0	21.70	320.73	509.61	400.25	419.55
10.4	8.4	9	0.62	0.50	0.40	19.00	3.56	164.9	21.70	327.55	511.45	401.69	426.97
10.5	8.5	9	0.62	0.50	0.40	19.00	3.56	166.9	21.70	334.36	513.28	403.13	434.39
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	168.9	0.00	334.36	0.00	0.00	436.35
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	170.8	0.00	334.36	0.00	0.00	438.31
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	172.8	0.00	334.36	0.00	0.00	440.28
10.9	8.9	11	0.70	0.50	0.86	37.70	45.19	174.8	46.83	349.08	4921.65	3865.46	454.01
11.0	9.0	11	0.70	0.50	0.86	37.70	45.17	176.7	47.24	363.92	4962.44	3897.50	467.85
11.1	9.1	11	0.70	0.50	0.86	37.70	45.15	178.7	47.65	378.89	5003.18	3929.49	481.79
11.2	9.2	11	0.70	0.50	0.86	37.70	45.13	180.6	48.07	393.99	5043.86	3961.44	495.83
11.3	9.3	11	0.70	0.50	0.86	37.70	45.11	182.6	48.48	409.22	5084.49	3993.35	509.98
11.4	9.4	11	0.70	0.50	0.86	37.70	45.09	184.6	48.89	424.58	5125.06	4025.22	524.23
11.5	9.5	11	0.70	0.50	0.86	37.70	45.07	186.5	49.30	440.06	5165.58	4057.04	538.58
11.6	9.6	11	0.70	0.50	0.86	37.70	45.04	188.5	49.71	455.68	5206.04	4088.81	553.04
11.7	9.7	11	0.70	0.50	0.86	37.70	45.02	190.5	50.12	471.42	5246.44	4120.55	567.60
11.8	9.8	11	0.70	0.50	0.86	37.70	45.00	192.4	50.53	487.30	5286.79	4152.23	582.26
11.9	9.9	11	0.70	0.50	0.86	37.70	44.98	194.4	50.94	503.30	5327.07	4183.87	597.03
12.0	10.0	11	0.70	0.50	0.86	37.70	44.95	196.3	51.35	519.43	5367.31	4215.47	611.90
12.1	10.1	11	0.70	0.50	0.86	37.70	44.93	198.3	51.76	535.69	5407.48	4247.02	626.87
12.2	10.2	11	0.70	0.50	0.86	37.70	44.91	200.3	52.17	552.08	5447.59	4278.53	641.94
12.3	10.3	11	0.70	0.50	0.86	37.70	44.89	202.2	52.58	568.60	5487.64	4309.99	657.12
12.4	10.4	11	0.70	0.50	0.86	37.70	44.86	204.2	52.99	585.25	5527.64	4341.40	672.40
12.5	10.5	11	0.70	0.50	0.86	37.70	44.84	206.2	53.40	602.02	5567.57	4372.76	687.78
12.6	10.6	11	0.70	0.50	0.86	37.70	44.82	208.1	53.81	618.93	5607.45	4404.08	703.27
12.7	10.7	11	0.70	0.50	0.86	37.70	44.79	210.1	54.22	635.96	5647.26	4435.35	718.86
12.8	10.8	11	0.70	0.50	0.86	37.70	44.77	212.1	54.63	653.12	5687.01	4466.57	734.56
12.9	10.9	11	0.70	0.50	0.86	37.70	44.75	214.0	55.04	670.41	5726.71	4497.74	750.35
13.0	11.0	11	0.70	0.50	0.86	37.70	44.72	216.0	55.45	687.83	5766.33	4528.87	766.25
13.1	11.1	11	0.70	0.50	0.86	37.70	44.70	217.9	55.86	705.38	5805.90	4559.94	782.25
13.2	11.2	11	0.70	0.50	0.86	37.70	44.68	219.9	56.27	723.06	5845.40	4590.97	798.36
13.3	11.3	11	0.70	0.50	0.86	37.70	44.65	221.9	56.68	740.87	5884.84	4621.95	814.57
13.4	11.4	11	0.70	0.50	0.86	37.70	44.63	223.8	57.09	758.80	5924.22	4652.87	830.88
13.5	11.5	11	0.70	0.50	0.86	37.70	44.60	225.8	57.50	776.87	5963.53	4683.75	847.30
13.6	11.6	11	0.70	0.50	0.86	37.70	44.58	227.8	57.91	795.06	6002.78	4714.57	863.82
13.7	11.7	11	0.70	0.50	0.86	37.70	44.55	229.7	58.32	813.38	6041.97	4745.35	880.44

13.8	11.8	11	0.70	0.50	0.86	37.70	44.53	231.7	58.73	831.84	6081.08	4776.07	897.16
13.9	11.9	11	0.70	0.50	0.86	37.70	44.50	233.7	59.14	850.42	6120.14	4806.74	913.99
14.0	12.0	11	0.70	0.50	0.86	37.70	44.48	235.6	59.55	869.13	6159.12	4837.36	930.92
14.1	12.1	11	0.70	0.50	0.86	37.70	44.45	237.6	59.96	887.96	6198.04	4867.93	947.95
14.2	12.2	11	0.70	0.50	0.86	37.70	44.43	239.5	60.37	906.93	6236.89	4898.44	965.09
14.3	12.3	11	0.70	0.50	0.86	37.70	44.40	241.5	60.78	926.03	6275.68	4928.91	982.33
14.4	12.4	11	0.70	0.50	0.86	37.70	44.38	243.5	61.19	945.25	6314.40	4959.31	999.67
14.5	12.5	11	0.70	0.50	0.86	37.70	44.35	245.4	61.60	964.61	6353.04	4989.67	1017.12
14.6	12.6	11	0.70	0.50	0.86	37.70	44.33	247.4	62.01	984.09	6391.62	5019.97	1034.67
14.7	12.7	11	0.70	0.50	0.86	37.70	44.30	249.4	62.43	1003.70	6430.13	5050.22	1052.32
14.8	12.8	11	0.70	0.50	0.86	37.70	44.27	251.3	62.84	1023.44	6468.58	5080.41	1070.08
14.9	12.9	11	0.70	0.50	0.86	37.70	44.25	253.3	63.25	1043.31	6506.95	5110.54	1087.94
15.0	13.0	11	0.70	0.50	0.86	37.70	44.22	255.3	63.66	1063.31	6545.25	5140.62	1105.90
15.1	13.1	11	0.70	0.50	0.86	37.70	44.19	257.2	64.07	1083.43	6583.48	5170.65	1123.97
15.2	13.2	11	0.70	0.50	0.86	37.70	44.17	259.2	64.48	1103.69	6621.63	5200.62	1142.13
15.3	13.3	11	0.70	0.50	0.86	37.70	44.14	261.1	64.89	1124.07	6659.72	5230.53	1160.40
15.4	13.4	11	0.70	0.50	0.86	37.70	44.11	263.1	65.30	1144.59	6697.73	5260.39	1178.78
15.5	13.5	11	0.70	0.50	0.86	37.70	44.09	265.1	65.71	1165.23	6735.68	5290.19	1197.26
15.6	13.6	11	0.70	0.50	0.86	37.70	44.06	267.0	66.12	1186.00	6773.54	5319.93	1215.84
15.7	13.7	11	0.70	0.50	0.86	37.70	44.03	269.0	66.53	1206.90	6811.34	5349.61	1234.52
15.8	13.8	11	0.70	0.50	0.86	37.70	44.00	271.0	66.94	1227.93	6849.06	5379.24	1253.31
15.9	13.9	11	0.70	0.50	0.86	37.70	43.98	272.9	67.35	1249.09	6886.70	5408.81	1272.20
16.0	14.0	11	0.70	0.50	0.86	37.70	43.95	274.9	67.76	1270.38	6924.28	5438.31	1291.19
16.1	14.1	11	0.70	0.50	0.86	37.70	43.92	276.9	68.17	1291.79	6961.77	5467.76	1310.29
16.2	14.2	11	0.70	0.50	0.86	37.70	43.89	278.8	68.58	1313.34	6999.19	5497.15	1329.49
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	280.8	0.00	1313.34	0.00	0.00	1331.45
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	282.7	0.00	1313.34	0.00	0.00	1333.41
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	284.7	0.00	1313.34	0.00	0.00	1335.38
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	286.7	0.00	1313.34	0.00	0.00	1337.34
16.7	14.7	13	0.70	0.50	0.86	37.70	43.75	288.6	70.63	1335.53	7185.14	5643.19	1357.06
16.8	14.8	13	0.70	0.50	0.86	37.70	43.72	290.6	71.04	1357.85	7222.09	5672.22	1376.87
16.9	14.9	13	0.70	0.50	0.86	37.70	43.69	292.6	71.45	1380.29	7258.97	5701.18	1396.80
17.0	15.0	13	0.70	0.50	0.86	37.70	43.66	294.5	71.86	1402.87	7295.76	5730.08	1416.82

1.2.6.2.3 Palo di diametro d=0.8m

Seleziona per inserire la falda	VERO	
z_w (m)	**1**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**2.0**	
Scgli tecnologia costruttiva	**Trivellati**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Sfilamento**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.35	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1086	-

Falda

Palo

Breve termine

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.50	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.7	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.8	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
1.9	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.0	0.0	2	0.62	0.50	0.40	19.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
2.1	0.1	3	0.70	0.50	0.00	0.00	0.00	1.3	0.00	0.00	0.00	0.00	1.26
2.2	0.2	3	0.70	0.50	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	2.51
2.3	0.3	3	0.70	0.50	0.00	0.00	0.00	3.8	0.00	0.00	0.00	0.00	3.77
2.4	0.4	3	0.70	0.50	0.00	0.00	0.00	5.0	0.00	0.00	0.00	0.00	5.03
2.5	0.5	3	0.70	0.50	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	6.28
2.6	0.6	3	0.70	0.50	0.00	0.00	0.00	7.5	0.00	0.00	0.00	0.00	7.54
2.7	0.7	3	0.70	0.50	0.00	0.00	0.00	8.8	0.00	0.00	0.00	0.00	8.80
2.8	0.8	3	0.70	0.50	0.00	0.00	0.00	10.1	0.00	0.00	0.00	0.00	10.05
2.9	0.9	3	0.70	0.50	0.00	0.00	0.00	11.3	0.00	0.00	0.00	0.00	11.31
3.0	1.0	3	0.70	0.50	0.00	0.00	0.00	12.6	0.00	0.00	0.00	0.00	12.57
3.1	1.1	3	0.70	0.50	0.00	0.00	0.00	13.8	0.00	0.00	0.00	0.00	13.82
3.2	1.2	3	0.70	0.50	0.00	0.00	0.00	15.1	0.00	0.00	0.00	0.00	15.08
3.3	1.3	3	0.70	0.50	0.00	0.00	0.00	16.3	0.00	0.00	0.00	0.00	16.34
3.4	1.4	3	0.70	0.50	0.00	0.00	0.00	17.6	0.00	0.00	0.00	0.00	17.59
3.5	1.5	3	0.70	0.50	0.00	0.00	0.00	18.8	0.00	0.00	0.00	0.00	18.85
3.6	1.6	4	0.70	0.50	0.83	36.55	40.45	20.1	18.06	4.54	1769.53	889.46	23.74
3.7	1.7	4	0.70	0.50	0.83	36.55	40.45	21.4	18.46	9.18	1808.12	908.86	28.71
3.8	1.8	4	0.70	0.50	0.83	36.55	40.45	22.6	18.85	13.92	1846.71	928.26	33.75
3.9	1.9	4	0.70	0.50	0.83	36.55	40.45	23.9	19.24	18.75	1885.30	947.65	38.88
4.0	2.0	4	0.70	0.50	0.83	36.55	40.45	25.1	19.64	23.69	1923.89	967.05	44.08
4.1	2.1	4	0.70	0.50	0.83	36.55	40.45	26.4	20.03	28.72	1962.48	986.45	49.37
4.2	2.2	4	0.70	0.50	0.83	36.55	40.45	27.6	20.43	33.86	2001.07	1005.85	54.73
4.3	2.3	5	0.70	0.50	0.40	19.00	3.57	28.9	17.50	38.25	307.70	154.66	59.51

4.4	2.4	5	0.70	0.50	0.40	19.00	3.57	30.2	17.50	42.65	309.53	155.59	64.28
4.5	2.5	5	0.70	0.50	0.40	19.00	3.57	31.4	17.50	47.05	311.36	156.51	69.06
4.6	2.6	5	0.70	0.50	0.40	19.00	3.57	32.7	17.50	51.45	313.19	157.43	73.83
4.7	2.7	5	0.70	0.50	0.40	19.00	3.57	33.9	17.50	55.85	315.03	158.35	78.61
4.8	2.8	5	0.70	0.50	0.40	19.00	3.57	35.2	17.50	60.25	316.86	159.27	83.38
4.9	2.9	6	0.70	0.50	0.00	0.00	0.00	36.4	0.00	60.25	0.00	0.00	84.64
5.0	3.0	6	0.70	0.50	0.00	0.00	0.00	37.7	0.00	60.25	0.00	0.00	85.90
5.1	3.1	6	0.70	0.50	0.00	0.00	0.00	39.0	0.00	60.25	0.00	0.00	87.15
5.2	3.2	6	0.70	0.50	0.00	0.00	0.00	40.2	0.00	60.25	0.00	0.00	88.41
5.3	3.3	6	0.70	0.50	0.00	0.00	0.00	41.5	0.00	60.25	0.00	0.00	89.67
5.4	3.4	6	0.70	0.50	0.00	0.00	0.00	42.7	0.00	60.25	0.00	0.00	90.92
5.5	3.5	6	0.70	0.50	0.00	0.00	0.00	44.0	0.00	60.25	0.00	0.00	92.18
5.6	3.6	6	0.70	0.50	0.00	0.00	0.00	45.2	0.00	60.25	0.00	0.00	93.44
5.7	3.7	6	0.70	0.50	0.00	0.00	0.00	46.5	0.00	60.25	0.00	0.00	94.69
5.8	3.8	6	0.70	0.50	0.00	0.00	0.00	47.8	0.00	60.25	0.00	0.00	95.95
5.9	3.9	7	0.62	0.50	0.40	19.00	3.57	49.0	21.70	65.70	428.04	215.16	101.57
6.0	4.0	7	0.62	0.50	0.40	19.00	3.57	50.3	21.70	71.15	429.88	216.08	107.19
6.1	4.1	7	0.62	0.50	0.40	19.00	3.57	51.5	21.70	76.61	431.71	217.00	112.81
6.2	4.2	7	0.62	0.50	0.40	19.00	3.57	52.8	21.70	82.06	433.54	217.92	118.43
6.3	4.3	7	0.62	0.50	0.40	19.00	3.57	54.0	21.70	87.52	435.38	218.84	124.05
6.4	4.4	7	0.62	0.50	0.40	19.00	3.57	55.3	21.70	92.97	437.21	219.76	129.67
6.5	4.5	7	0.62	0.50	0.40	19.00	3.57	56.5	21.70	98.42	439.04	220.69	135.29
6.6	4.6	7	0.62	0.50	0.40	19.00	3.57	57.8	21.70	103.88	440.87	221.61	140.91
6.7	4.7	7	0.62	0.50	0.40	19.00	3.57	59.1	21.70	109.33	442.71	222.53	146.53
6.8	4.8	7	0.62	0.50	0.40	19.00	3.57	60.3	21.70	114.78	444.54	223.45	152.15
6.9	4.9	7	0.62	0.50	0.40	19.00	3.57	61.6	21.70	120.24	446.37	224.37	157.77
7.0	5.0	7	0.62	0.50	0.40	19.00	3.57	62.8	21.70	125.69	448.21	225.29	163.39
7.1	5.1	7	0.62	0.50	0.40	19.00	3.57	64.1	21.70	131.15	450.04	226.21	169.00
7.2	5.2	7	0.62	0.50	0.40	19.00	3.57	65.3	21.70	136.60	451.87	227.14	174.62
7.3	5.3	7	0.62	0.50	0.40	19.00	3.57	66.6	21.70	142.05	453.71	228.06	180.24
7.4	5.4	7	0.62	0.50	0.40	19.00	3.57	67.9	21.70	147.51	455.54	228.98	185.86
7.5	5.5	7	0.62	0.50	0.40	19.00	3.57	69.1	21.70	152.96	457.37	229.90	191.48
7.6	5.6	7	0.62	0.50	0.40	19.00	3.57	70.4	21.70	158.41	459.20	230.82	197.10
7.7	5.7	7	0.62	0.50	0.40	19.00	3.57	71.6	21.70	163.87	461.04	231.74	202.72
7.8	5.8	7	0.62	0.50	0.40	19.00	3.57	72.9	21.70	169.32	462.87	232.66	208.34
7.9	5.9	8	0.70	0.50	0.00	0.00	0.00	74.1	0.00	169.32	0.00	0.00	209.60
8.0	6.0	8	0.70	0.50	0.00	0.00	0.00	75.4	0.00	169.32	0.00	0.00	210.86
8.1	6.1	8	0.70	0.50	0.00	0.00	0.00	76.7	0.00	169.32	0.00	0.00	212.11
8.2	6.2	8	0.70	0.50	0.00	0.00	0.00	77.9	0.00	169.32	0.00	0.00	213.37
8.3	6.3	8	0.70	0.50	0.00	0.00	0.00	79.2	0.00	169.32	0.00	0.00	214.63
8.4	6.4	8	0.70	0.50	0.00	0.00	0.00	80.4	0.00	169.32	0.00	0.00	215.88
8.5	6.5	8	0.70	0.50	0.00	0.00	0.00	81.7	0.00	169.32	0.00	0.00	217.14
8.6	6.6	8	0.70	0.50	0.00	0.00	0.00	82.9	0.00	169.32	0.00	0.00	218.40
8.7	6.7	8	0.70	0.50	0.00	0.00	0.00	84.2	0.00	169.32	0.00	0.00	219.65
8.8	6.8	9	0.62	0.50	0.40	19.00	3.56	85.5	21.70	174.78	482.12	242.34	225.27
8.9	6.9	9	0.62	0.50	0.40	19.00	3.55	86.7	21.70	180.23	483.95	243.26	230.89
9.0	7.0	9	0.62	0.50	0.40	19.00	3.55	88.0	21.70	185.68	485.78	244.18	236.51

9.1	7.1	9	0.62	0.50	0.40	19.00	3.55	89.2	21.70	191.14	487.62	245.10	242.13
9.2	7.2	9	0.62	0.50	0.40	19.00	3.54	90.5	21.70	196.59	489.45	246.02	247.75
9.3	7.3	9	0.62	0.50	0.40	19.00	3.54	91.7	21.70	202.05	491.28	246.95	253.37
9.4	7.4	9	0.62	0.50	0.40	19.00	3.54	93.0	21.70	207.50	493.12	247.87	258.99
9.5	7.5	9	0.62	0.50	0.40	19.00	3.53	94.2	21.70	212.95	494.95	248.79	264.61
9.6	7.6	9	0.62	0.50	0.40	19.00	3.53	95.5	21.70	218.41	496.78	249.71	270.23
9.7	7.7	9	0.62	0.50	0.40	19.00	3.53	96.8	21.70	223.86	498.62	250.63	275.85
9.8	7.8	9	0.62	0.50	0.40	19.00	3.52	98.0	21.70	229.31	500.45	251.55	281.47
9.9	7.9	9	0.62	0.50	0.40	19.00	3.52	99.3	21.70	234.77	502.28	252.47	287.09
10.0	8.0	9	0.62	0.50	0.40	19.00	3.52	100.5	21.70	240.22	504.11	253.40	292.71
10.1	8.1	9	0.62	0.50	0.40	19.00	3.51	101.8	21.70	245.68	505.95	254.32	298.33
10.2	8.2	9	0.62	0.50	0.40	19.00	3.51	103.0	21.70	251.13	507.78	255.24	303.95
10.3	8.3	9	0.62	0.50	0.40	19.00	3.51	104.3	21.70	256.58	509.61	256.16	309.57
10.4	8.4	9	0.62	0.50	0.40	19.00	3.50	105.6	21.70	262.04	511.45	257.08	315.19
10.5	8.5	9	0.62	0.50	0.40	19.00	3.50	106.8	21.70	267.49	513.28	258.00	320.81
10.6	8.6	10	0.70	0.50	0.00	0.00	0.00	108.1	0.00	267.49	0.00	0.00	322.06
10.7	8.7	10	0.70	0.50	0.00	0.00	0.00	109.3	0.00	267.49	0.00	0.00	323.32
10.8	8.8	10	0.70	0.50	0.00	0.00	0.00	110.6	0.00	267.49	0.00	0.00	324.58
10.9	8.9	11	0.70	0.50	0.86	37.70	44.69	111.8	46.83	279.26	4867.10	2446.47	335.25
11.0	9.0	11	0.70	0.50	0.86	37.70	44.66	113.1	47.24	291.14	4906.44	2466.24	346.01
11.1	9.1	11	0.70	0.50	0.86	37.70	44.63	114.4	47.65	303.11	4945.69	2485.98	356.84
11.2	9.2	11	0.70	0.50	0.86	37.70	44.60	115.6	48.07	315.19	4984.87	2505.67	367.76
11.3	9.3	11	0.70	0.50	0.86	37.70	44.57	116.9	48.48	327.38	5023.96	2525.32	378.77
11.4	9.4	11	0.70	0.50	0.86	37.70	44.54	118.1	48.89	339.66	5062.97	2544.93	389.85
11.5	9.5	11	0.70	0.50	0.86	37.70	44.51	119.4	49.30	352.05	5101.90	2564.49	401.02
11.6	9.6	11	0.70	0.50	0.86	37.70	44.48	120.6	49.71	364.54	5140.74	2584.02	412.27
11.7	9.7	11	0.70	0.50	0.86	37.70	44.45	121.9	50.12	377.14	5179.50	2603.50	423.61
11.8	9.8	11	0.70	0.50	0.86	37.70	44.42	123.2	50.53	389.84	5218.18	2622.94	435.02
11.9	9.9	11	0.70	0.50	0.86	37.70	44.38	124.4	50.94	402.64	5256.76	2642.34	446.52
12.0	10.0	11	0.70	0.50	0.86	37.70	44.35	125.7	51.35	415.55	5295.27	2661.69	458.10
12.1	10.1	11	0.70	0.50	0.86	37.70	44.32	126.9	51.76	428.55	5333.68	2681.00	469.76
12.2	10.2	11	0.70	0.50	0.86	37.70	44.29	128.2	52.17	441.66	5372.01	2700.27	481.51
12.3	10.3	11	0.70	0.50	0.86	37.70	44.25	129.4	52.58	454.88	5410.25	2719.49	493.34
12.4	10.4	11	0.70	0.50	0.86	37.70	44.22	130.7	52.99	468.20	5448.40	2738.67	505.25
12.5	10.5	11	0.70	0.50	0.86	37.70	44.19	131.9	53.40	481.62	5486.46	2757.80	517.24
12.6	10.6	11	0.70	0.50	0.86	37.70	44.15	133.2	53.81	495.14	5524.43	2776.88	529.32
12.7	10.7	11	0.70	0.50	0.86	37.70	44.12	134.5	54.22	508.77	5562.31	2795.92	541.47
12.8	10.8	11	0.70	0.50	0.86	37.70	44.09	135.7	54.63	522.50	5600.10	2814.92	553.72
12.9	10.9	11	0.70	0.50	0.86	37.70	44.05	137.0	55.04	536.33	5637.80	2833.87	566.04
13.0	11.0	11	0.70	0.50	0.86	37.70	44.02	138.2	55.45	550.27	5675.40	2852.77	578.44
13.1	11.1	11	0.70	0.50	0.86	37.70	43.98	139.5	55.86	564.31	5712.91	2871.62	590.93
13.2	11.2	11	0.70	0.50	0.86	37.70	43.95	140.7	56.27	578.45	5750.32	2890.43	603.50
13.3	11.3	11	0.70	0.50	0.86	37.70	43.91	142.0	56.68	592.69	5787.64	2909.18	616.16
13.4	11.4	11	0.70	0.50	0.86	37.70	43.88	143.3	57.09	607.04	5824.86	2927.89	628.89
13.5	11.5	11	0.70	0.50	0.86	37.70	43.84	144.5	57.50	621.50	5861.99	2946.56	641.71
13.6	11.6	11	0.70	0.50	0.86	37.70	43.81	145.8	57.91	636.05	5899.01	2965.17	654.61
13.7	11.7	11	0.70	0.50	0.86	37.70	43.77	147.0	58.32	650.71	5935.94	2983.73	667.59

13.8	11.8	11	0.70	0.50	0.86	37.70	43.74	148.3	58.73	665.47	5972.78	3002.24	680.66
13.9	11.9	11	0.70	0.50	0.86	37.70	43.70	149.5	59.14	680.33	6009.51	3020.71	693.81
14.0	12.0	11	0.70	0.50	0.86	37.70	43.66	150.8	59.55	695.30	6046.14	3039.12	707.04
14.1	12.1	11	0.70	0.50	0.86	37.70	43.63	152.1	59.96	710.37	6082.67	3057.48	720.35
14.2	12.2	11	0.70	0.50	0.86	37.70	43.59	153.3	60.37	725.54	6119.10	3075.79	733.75
14.3	12.3	11	0.70	0.50	0.86	37.70	43.55	154.6	60.78	740.82	6155.42	3094.05	747.22
14.4	12.4	11	0.70	0.50	0.86	37.70	43.51	155.8	61.19	756.20	6191.64	3112.26	760.78
14.5	12.5	11	0.70	0.50	0.86	37.70	43.48	157.1	61.60	771.68	6227.76	3130.41	774.43
14.6	12.6	11	0.70	0.50	0.86	37.70	43.44	158.3	62.01	787.27	6263.77	3148.52	788.15
14.7	12.7	11	0.70	0.50	0.86	37.70	43.40	159.6	62.43	802.96	6299.68	3166.57	801.96
14.8	12.8	11	0.70	0.50	0.86	37.70	43.36	160.8	62.84	818.75	6335.48	3184.56	815.85
14.9	12.9	11	0.70	0.50	0.86	37.70	43.34	162.1	63.25	834.65	6373.56	3203.70	829.82
15.0	13.0	11	0.70	0.50	0.86	37.70	43.32	163.4	63.66	850.65	6411.59	3222.82	843.88
15.1	13.1	11	0.70	0.50	0.86	37.70	43.30	164.6	64.07	866.75	6449.58	3241.91	858.02
15.2	13.2	11	0.70	0.50	0.86	37.70	43.27	165.9	64.48	882.95	6487.53	3260.99	872.24
15.3	13.3	11	0.70	0.50	0.86	37.70	43.25	167.1	64.89	899.26	6525.44	3280.04	886.54
15.4	13.4	11	0.70	0.50	0.86	37.70	43.23	168.4	65.30	915.67	6563.30	3299.08	900.93
15.5	13.5	11	0.70	0.50	0.86	37.70	43.21	169.6	65.71	932.18	6601.13	3318.09	915.39
15.6	13.6	11	0.70	0.50	0.86	37.70	43.18	170.9	66.12	948.80	6638.92	3337.08	929.94
15.7	13.7	11	0.70	0.50	0.86	37.70	43.16	172.2	66.53	965.52	6676.66	3356.06	944.58
15.8	13.8	11	0.70	0.50	0.86	37.70	43.14	173.4	66.94	982.35	6714.37	3375.01	959.29
15.9	13.9	11	0.70	0.50	0.86	37.70	43.12	174.7	67.35	999.27	6752.03	3393.94	974.09
16.0	14.0	11	0.70	0.50	0.86	37.70	43.09	175.9	67.76	1016.30	6789.65	3412.85	988.97
16.1	14.1	11	0.70	0.50	0.86	37.70	43.07	177.2	68.17	1033.43	6827.24	3431.74	1003.93
16.2	14.2	11	0.70	0.50	0.86	37.70	43.05	178.4	68.58	1050.67	6864.78	3450.61	1018.98
16.3	14.3	12	0.70	0.50	0.00	0.00	0.00	179.7	0.00	1050.67	0.00	0.00	1020.24
16.4	14.4	12	0.70	0.50	0.00	0.00	0.00	181.0	0.00	1050.67	0.00	0.00	1021.49
16.5	14.5	12	0.70	0.50	0.00	0.00	0.00	182.2	0.00	1050.67	0.00	0.00	1022.75
16.6	14.6	12	0.70	0.50	0.00	0.00	0.00	183.5	0.00	1050.67	0.00	0.00	1024.01
16.7	14.7	13	0.70	0.50	0.86	37.70	42.94	184.7	70.63	1068.42	7051.88	3544.66	1039.46
16.8	14.8	13	0.70	0.50	0.86	37.70	42.92	186.0	71.04	1086.28	7089.17	3563.41	1055.00
16.9	14.9	13	0.70	0.50	0.86	37.70	42.89	187.2	71.45	1104.23	7126.43	3582.14	1070.63
17.0	15.0	13	0.70	0.50	0.86	37.70	42.87	188.5	71.86	1122.30	7163.65	3600.84	1086.33

2 Calcolo del carico limite orizzontale dei pali

Il carico limite per azioni trasversali (orizzontali) dei pali è stato calcolato in accordo con quanto prescritto dalle Norme Tecniche per le Costruzioni (NTC 2018) al Paragrafo 6.4.3.1.2 "Resistenze di pali soggetti a carichi trasversali". La norma in particolare prescrive il medesimo approccio descritto al Capitolo 1 per il calcolo del carico limite verticale, ma per la determinazione del valore di progetto $R_{tr,d}$ della resistenza di pali soggetti a carichi trasversali dispone l'utilizzo del coefficiente parziale γ_T della Tab. 6.4.VI delle NTC riportata di seguito.

Tabella 2-1Coefficiente parziale γ_T per le verifiche agli stati limite ultimi di pali soggetti a carichi trasversali (Tab. 6.4.VI delle NTC).

Coefficiente parziale (R3)
$\gamma_T = 1,3$

In

Tabella 2-2 si riportano rispettivamente i valori calcolati del carico limite orizzontale per le tre condizioni:

- statica di breve termine
- statica di lungo termine
- sismica (breve termine)

Così come prescritto dalle NTC, i valori del carico limite sono stati calcolati per le 6 verticali d'indagine: CPTu8, CPTu4, CPT1_2012, CPTu1, CPTu3 e CPTu2bis che sono state protratte sino ad una profondità tale da investigare il volume significativo di terreno interessato dall'interazione con i pali in progetto.

Si precisa che la verifica in condizioni sismiche è stata eseguita assumendo che gli strati sabbiosi risultati liquefacibili dalla specifica analisi riportata al Capitolo 4 della relazione geotecnica non contribuiscano alla resistenza dei pali (ponendo il coefficiente di spinta passiva K_p=0).

I valori del carico limite orizzontale di progetto, calcolati come precedentemente illustrato, sono riportati in grassetto nell'ultima

colonna della

Tabella 2-2. Gli output di calcolo sono riportati nei paragrafi seguenti.

Tabella 2-2 Valori del carico limite orizzontale calcolati nella condizione sismica, statica di breve termine e statica di lungo termine.

SISMICA

d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	R_d (kN)
1.2	957	1696	1946	977	972	1224	1295	957	**731**
1.0	632	1206	1515	685	642	874	926	632	**483**
0.8	371	803	1059	412	379	545	595	371	**283**

STATICA - BREVE TERMINE

d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	R_d (kN)
1.2	1854	1885	2024	1836	1899	1873	1895	1836	**1285**
1.0	1297	1301	1528	1292	1322	1330	1345	1292	**912**
0.8	827	820	1059	823	840	842	869	820	**589**

STATICA - LUNGO TERMINE

d (m)	CPTu8	CPTu4	CPT1_2012	CPTu1	CPTu3	CPTu2bis	$(R_{d,cal})_{media}$ (kN)	$(R_{d,cal})_{min}$ (kN)	R_d (kN)
1.2	1879	1839	1855	1884	1911	1900	1878	1839	**1273**
1.0	1307	1275	1287	1304	1331	1315	1303	1275	**884**
0.8	827	806	815	828	840	827	824	806	**559**

2.1.1 Calcolo del carico limite con riferimento alla prova CPTu8

2.1.1.1 Condizioni statiche lungo termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.4	19.35	Frictional	34
2	2.4	4.4	19.35	Frictional	34
3	4.4	5.2	18.33	Frictional	22
4	5.2	5.9	19.35	Frictional	35
5	5.9	9.8	18.33	Frictional	22
6	9.8	10.6	19.35	Frictional	34
7	10.6	11.6	18.33	Frictional	22
8	11.6	11.8	19.35	Frictional	36
9	11.8	13.4	19.35	Frictional	41
10	13.4	14.5	19.35	Frictional	36
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	36
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	36
15	26.0	27.9	18.33	Frictional	22

2.1.1.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10819	3048	1879	1879

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10819	2950	1417	1417

2.1.1.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9016	2458	1307	1307

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9016	2418	996	996

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9016	2336	666	666

2.1.1.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7213	1934	827	827

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7213	1901	635	635

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7213	1869	374	374

2.1.1.2 Condizioni statiche breve termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.4	19.35	Frictional	34
2	2.4	4.4	19.35	Frictional	34
3	4.4	5.2	18.33	Cohesive	25
4	5.2	5.9	19.35	Frictional	35
5	5.9	9.8	18.33	Cohesive	30
6	9.8	10.6	19.35	Frictional	34
7	10.6	11.6	18.33	Cohesive	50
8	11.6	11.8	19.35	Frictional	36
9	11.8	13.4	19.35	Frictional	41
10	13.4	14.5	19.35	Frictional	36
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	36
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	36
15	26.0	27.9	18.33	Cohesive	175

2.1.1.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9491	2562	1854	1854

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9491	2462	1413	1413

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9491	2412	1060	1060

2.1.1.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7909	2093	1297	1297

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7909	2052	996	996

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7909	1968	666	666

2.1.1.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6327	1641	827	827

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6327	1608	635	635

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**2000**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6327	1575	374	374

2.1.1.3 Condizione sismica (breve termine)

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.4	19.35	Frictional	
2	2.4	4.4	19.35	Frictional	
3	4.4	5.2	18.33	Cohesive	25
4	5.2	5.9	19.35	Frictional	
5	5.9	9.8	18.33	Cohesive	30
6	9.8	10.6	19.35	Frictional	34
7	10.6	11.6	18.33	Cohesive	50
8	11.6	11.8	19.35	Frictional	
9	11.8	13.4	19.35	Frictional	41
10	13.4	14.5	19.35	Frictional	
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	
15	26.0	27.9	18.33	Cohesive	175

2.1.1.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5895	1139	957	957

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5895	1042	662	662

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**.**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5895	993	452	452

2.1.1.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4913	909	632	632

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4913	868	442	442

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_5	1.475	
ξ_6	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4913	787	262	262

2.1.1.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
3930	695	371	371

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
3930	662	262	262

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
3930	630	130	130

2.1.2 2Calcolo del carico limite con riferimento alla prova CPTu4

2.1.2.1 Condizioni statiche lungo termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.0	19.35	Frictional	35
2	2.0	2.9	19.35	Frictional	35
3	2.9	4.3	18.33	Frictional	22
4	4.3	5.9	19.35	Frictional	36
5	5.9	11.0	18.33	Frictional	22
6	11.0	11.6	19.35	Frictional	41
7	11.6	11.8	19.35	Frictional	38
8	11.8	14.7	19.35	Frictional	41
9	14.7	14.9	19.35	Frictional	38
10	14.9	16.8	19.35	Frictional	42
11	16.8	17.4	19.35	Frictional	38
12	17.4	17.8	19.35	Frictional	41
13	17.8	18.0	19.35	Frictional	38

2.1.2.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11312	3048	1839	1839

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11312	2951	1375	1375

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11312	2853	1045	1045

2.1.2.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9427	2459	1275	1275

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9427	2418	973	973

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9427	2378	675	675

2.1.2.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7542	1935	806	806

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7542	1902	633	633

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7542	1870	380	380

2.1.2.2 Condizioni statiche breve termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.0	19.35	Frictional	35
2	2.0	2.9	19.35	Frictional	35
3	2.9	4.3	18.33	Cohesive	40
4	4.3	5.9	19.35	Frictional	36
5	5.9	11.0	18.33	Cohesive	50
6	11.0	11.6	19.35	Frictional	41
7	11.6	11.8	19.35	Frictional	38
8	11.8	14.7	19.35	Frictional	41
9	14.7	14.9	19.35	Frictional	38
10	14.9	16.8	19.35	Frictional	42
11	16.8	17.4	19.35	Frictional	38
12	17.4	17.8	19.35	Frictional	41
13	17.8	18.0	19.35	Frictional	38

2.1.2.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10847	2976	1885	1885

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10847	2877	1400	1400

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10847	2779	1062	1062

2.1.2.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9039	2398	1301	1301

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9039	2357	991	991

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9039	2316	677	677

2.1.2.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7231	1885	820	820

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**2000**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7231	1853	641	641

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7231	1820	380	380

2.1.2.3 Condizione sismica (breve termine)

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	2.0	19.35	Frictional	35
2	2.0	2.9	19.35	Frictional	35
3	2.9	4.3	18.33	Cohesive	40
4	4.3	5.9	19.35	Frictional	
5	5.9	11.0	18.33	Cohesive	50
6	11.0	11.6	19.35	Frictional	41
7	11.6	11.8	19.35	Frictional	
8	11.8	14.7	19.35	Frictional	41
9	14.7	14.9	19.35	Frictional	
10	14.9	16.8	19.35	Frictional	42
11	16.8	17.4	19.35	Frictional	
12	17.4	17.8	19.35	Frictional	41
13	17.8	18.0	19.35	Frictional	

2.1.2.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9256	2300	1696	1696

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9256	2201	1328	1328

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9256	2151	1062	1062

2.1.2.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7714	1875	1206	1206

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7714	1793	977	977

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7714	1752	677	677

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6171	1401	380	380

2.1.2.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6171	1434	803	803

2.1.3 Calcolo del carico limite con riferimento alla prova CPT1_2012

2.1.3.1 Condizioni statiche lungo termine

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.1	19.35	Frictional	40
2	1.1	2.5	18.33	Frictional	22
3	2.5	3.6	19.35	Frictional	40
4	3.6	3.8	19.35	Frictional	36
5	3.8	4.0	19.35	Frictional	40
6	4.0	5.0	18.33	Frictional	22
7	5.0	5.5	19.35	Frictional	36
8	5.5	10.0	18.33	Frictional	22
9	10.0	10.4	19.35	Frictional	40
10	10.4	11.2	19.35	Frictional	37
11	11.2	30.0	19.35	Frictional	41

2.1.3.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11726	3047	1855	1855

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11726	2951	1393	1393

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11726	2902	1033	1033

2.1.3.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9771	2499	1287	1287

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9771	2419	977	977

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9771	2379	642	642

2.1.3.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7817	1967	815	815

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9771	2379	662	662

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9771	2339	390	390

2.1.3.2 Condizioni statiche breve termine

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.1	19.35	Frictional	40
2	1.1	2.5	18.33	Cohesive	86
3	2.5	3.6	19.35	Frictional	40
4	3.6	3.8	19.35	Frictional	36
5	3.8	4.0	19.35	Frictional	40
6	4.0	5.0	18.33	Cohesive	40
7	5.0	5.5	19.35	Frictional	36
8	5.5	10.0	18.33	Cohesive	34
9	10.0	10.4	19.35	Frictional	40
10	10.4	11.2	19.35	Frictional	37
11	11.2	30.0	19.35	Frictional	41

2.1.3.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11133	2989	2024	2024

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11133	2891	1530	1530

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11133	2843	1128	1128

2.1.3.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9456	2588	1528	1528

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9456	2547	1171	1171

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9456	2466	774	774

2.1.3.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7708	2148	1059	1059

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7708	2116	824	824

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7708	2083	462	462

2.1.3.3 Condizione sismica (breve termine)

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.1	19.35	Frictional	40
2	1.1	2.5	18.33	Cohesive	86
3	2.5	3.6	19.35	Frictional	40
4	3.6	3.8	19.35	Frictional	
5	3.8	4.0	19.35	Frictional	40
6	4.0	5.0	18.33	Cohesive	40
7	5.0	5.5	19.35	Frictional	
8	5.5	10.0	18.33	Cohesive	34
9	10.0	10.4	19.35	Frictional	40
10	10.4	11.2	19.35	Frictional	
11	11.2	30.0	19.35	Frictional	41

2.1.3.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9763	2558	1946	1946

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9763	2508	1514	1514

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12018	2955	1128	1128

2.1.3.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8314	2269	1515	1515

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8314	2186	1166	1166

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8314	2144	774	774

2.1.3.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6794	1891	1059	1059

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6794	1858	824	824

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6794	1825	462	462

2.1.4 Calcolo del carico limite con riferimento alla prova CPTu1

2.1.4.1 Condizioni statiche lungo termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.5	19.35	Frictional	36
2	1.5	2.0	18.33	Frictional	22
3	2.0	4.1	19.35	Frictional	36
4	4.1	4.8	18.33	Frictional	22
5	4.8	5.8	19.35	Frictional	36
6	5.8	7.8	18.33	Frictional	22
7	7.8	8.7	19.35	Frictional	38
8	8.7	10.5	18.33	Frictional	22
9	10.5	11.8	19.35	Frictional	36
10	11.8	16.3	19.35	Frictional	43
11	16.3	16.6	19.35	Frictional	38
12	16.6	18.7	19.35	Frictional	41
13	18.7	18.9	19.35	Frictional	36
14	18.9	20.4	19.35	Frictional	41
15	20.4	21.0	19.35	Frictional	36
16	21.0	21.3	19.35	Frictional	41
17	21.3	24.0	19.35	Frictional	36

2.1.4.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12615	3302	1884	1884

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12615	3192	1416	1416

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12615	3137	1054	1054

2.1.4.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10512	2706	1304	1304

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10512	2660	997	997

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10512	2614	662	662

2.1.4.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8410	2128	828	828

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8410	2091	635	635

2.1.4.2 Condizioni statiche breve termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.5	19.35	Frictional	36
2	1.5	2.0	18.33	Cohesive	16
3	2.0	4.1	19.35	Frictional	36
4	4.1	4.8	18.33	Cohesive	25
5	4.8	5.8	19.35	Frictional	36
6	5.8	7.8	18.33	Cohesive	35
7	7.8	8.7	19.35	Frictional	38
8	8.7	10.5	18.33	Cohesive	40
9	10.5	11.8	19.35	Frictional	36
10	11.8	16.3	19.35	Frictional	43
11	16.3	16.6	19.35	Frictional	38
12	16.6	18.7	19.35	Frictional	41
13	18.7	18.9	19.35	Frictional	36
14	18.9	20.4	19.35	Frictional	41
15	20.4	21.0	19.35	Frictional	36
16	21.0	21.3	19.35	Frictional	41
17	21.3	24.0	19.35	Frictional	36

2.1.4.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11721	2964	1836	1836

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11721	2852	1367	1367

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11721	2797	1024	1024

2.1.4.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9801	2457	1292	1292

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9801	2410	993	993

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9801	2364	657	657

2.1.4.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7840	1928	823	823

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9801	2364	679	679

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9801	2317	400	400

2.1.4.3 Condizione sismica (breve termine)

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.5	19.35	Frictional	
2	1.5	2.0	18.33	Cohesive	16
3	2.0	4.1	19.35	Frictional	
4	4.1	4.8	18.33	Cohesive	25
5	4.8	5.8	19.35	Frictional	
6	5.8	7.8	18.33	Cohesive	35
7	7.8	8.7	19.35	Frictional	
8	8.7	10.5	18.33	Cohesive	40
9	10.5	11.8	19.35	Frictional	
10	11.8	16.3	19.35	Frictional	43
11	16.3	16.6	19.35	Frictional	
12	16.6	18.7	19.35	Frictional	41
13	18.7	18.9	19.35	Frictional	
14	18.9	20.4	19.35	Frictional	41
15	20.4	21.0	19.35	Frictional	
16	21.0	21.3	19.35	Frictional	41
17	21.3	24.0	19.35	Frictional	

2.1.4.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7555	1140	977	977

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7555	1081	696	696

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7555	1023	478	478

2.1.4.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6329	934	685	685

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6329	886	493	493

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6329	837	304	304

2.1.4.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5063	709	412	412

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_j	1.475	
ξ_j	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5063	709	298	298

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5063	670	165	165

2.1.5 Calcolo del carico limite con riferimento alla prova CPTu3

2.1.5.1 Condizioni statiche lungo termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	3.3	19.35	Frictional	35
2	2.5	4.4	19.35	Frictional	35
3	4.4	5.2	18.33	Frictional	22
4	5.2	5.9	19.35	Frictional	35
5	5.9	9.7	18.33	Frictional	22
6	9.7	10.5	19.35	Frictional	38
7	10.5	11.6	18.33	Frictional	22
8	11.6	11.9	19.35	Frictional	36
9	11.9	13.4	19.35	Frictional	42
10	13.4	14.5	19.35	Frictional	36
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	36
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	36
15	26.0	29.6	18.33	Frictional	22

2.1.5.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11154	3084	1911	1911

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11154	3033	1443	1443

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11154	2930	1074	1074

2.1.5.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9295	2527	1331	1331

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9295	2484	1012	1012

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9295	2441	676	676

2.1.5.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7436	1987	840	840

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7436	1953	646	646

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7436	1919	380	380

2.1.5.2 Condizioni statiche breve termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	3.3	19.35	Frictional	35
2	2.5	4.4	19.35	Frictional	35
3	4.4	5.2	18.33	Cohesive	30
4	5.2	5.9	19.35	Frictional	35
5	5.9	9.7	18.33	Cohesive	30
6	9.7	10.5	19.35	Frictional	38
7	10.5	11.6	18.33	Cohesive	80
8	11.6	11.9	19.35	Frictional	36
9	11.9	13.4	19.35	Frictional	42
10	13.4	14.5	19.35	Frictional	36
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	36
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	36
15	26.0	29.6	18.33	Cohesive	150

2.1.5.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10140	2745	1899	1899

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10140	2641	1439	1439

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10140	2588	1074	1074

2.1.5.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8450	2201	1322	1322

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8450	2157	1012	1012

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8450	2114	676	676

2.1.5.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6760	1726	840	840

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6760	1691	646	646

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6760	1656	380	380

2.1.5.3 Condizione sismica (breve termine)

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	3.3	19.35	Frictional	
2	2.5	4.4	19.35	Frictional	
3	4.4	5.2	18.33	Cohesive	30
4	5.2	5.9	19.35	Frictional	
5	5.9	9.7	18.33	Cohesive	30
6	9.7	10.5	19.35	Frictional	38
7	10.5	11.6	18.33	Cohesive	80
8	11.6	11.9	19.35	Frictional	
9	11.9	13.4	19.35	Frictional	42
10	13.4	14.5	19.35	Frictional	
11	14.5	16.2	19.35	Frictional	41
12	16.2	17.2	19.35	Frictional	
13	17.2	19.8	19.35	Frictional	41
14	19.8	26.0	19.35	Frictional	
15	26.0	29.6	18.33	Cohesive	150

2.1.5.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6370	1252	972	972

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6370	1150	673	673

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
6370	1098	464	464

2.1.5.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5308	958	642	642

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5308	915	452	452

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5308	873	268	268

2.1.5.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4247	732	379	379

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4247	698	269	269

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
4247	664	135	135

2.1.6 Calcolo del carico limite con riferimento alla prova CPTu2-bis

2.1.6.1 Condizioni statiche lungo termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.6	19.35	Frictional	35
2	1.6	2.0	18.33	Frictional	22
3	2.0	3.5	19.35	Frictional	35
4	3.5	4.2	19.35	Frictional	40
5	4.2	4.8	18.33	Frictional	22
6	4.8	5.8	19.35	Frictional	34
7	5.8	7.8	18.33	Frictional	22
8	7.8	8.7	19.35	Frictional	38
9	8.7	10.5	18.33	Frictional	22
10	10.5	10.8	19.35	Frictional	36
11	10.8	16.2	19.35	Frictional	41
12	16.2	16.6	19.35	Frictional	36
13	16.6	18.7	19.35	Frictional	41
14	18.7	18.9	19.35	Frictional	36
15	18.9	21.2	19.35	Frictional	41
16	21.2	22.3	19.35	Frictional	36
17	22.3	23.3	19.35	Frictional	41
18	23.3	23.6	19.35	Frictional	36
19	23.6	23.8	19.35	Frictional	41
20	23.8	25.0	19.35	Frictional	36

2.1.6.1.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12293	3327	1900	1900

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12293	3230	1420	1420

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
12293	3132	1053	1053

2.1.6.1.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10244	2691	1315	1315

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10244	2651	988	988

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
10244	2610	661	661

2.1.6.1.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8195	2121	827	827

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8195	2088	628	628

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8195	2056	370	370

2.1.6.2 Condizioni statiche breve termine

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.6	19.35	Frictional	35
2	1.6	2.0	18.33	Cohesive	35
3	2.0	3.5	19.35	Frictional	35
4	3.5	4.2	19.35	Frictional	40
5	4.2	4.8	18.33	Cohesive	25
6	4.8	5.8	19.35	Frictional	34
7	5.8	7.8	18.33	Cohesive	35
8	7.8	8.7	19.35	Frictional	38
9	8.7	10.5	18.33	Cohesive	35
10	10.5	10.8	19.35	Frictional	36
11	10.8	16.2	19.35	Frictional	41
12	16.2	16.6	19.35	Frictional	36
13	16.6	18.7	19.35	Frictional	41
14	18.7	18.9	19.35	Frictional	36
15	18.9	21.2	19.35	Frictional	41
16	21.2	22.3	19.35	Frictional	36
17	22.3	23.3	19.35	Frictional	41
18	23.3	23.6	19.35	Frictional	36
19	23.6	23.8	19.35	Frictional	41
20	23.8	25.0	19.35	Frictional	36

2.1.6.2.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11374	3001	1873	1873

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11374	2901	1408	1408

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
11374	2852	1046	1046

2.1.6.2.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9526	2465	1330	1330

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9526	2424	1015	1015

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
9526	2383	681	681

2.1.6.2.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7621	1939	842	842

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7621	1906	645	645

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7621	1873	382	382

2.1.6.3 Condizione sismica (breve termine)

Subsoil Geotechnical Model

ID strato	z_{min} (m)	z_{max} (m)	γ (kN/m^3)	Soil type	c_u (kPa) - φ (°)
1	0.0	1.6	19.35	Frictional	
2	1.6	2.0	18.33	Cohesive	35
3	2.0	3.5	19.35	Frictional	
4	3.5	4.2	19.35	Frictional	40
5	4.2	4.8	18.33	Cohesive	25
6	4.8	5.8	19.35	Frictional	
7	5.8	7.8	18.33	Cohesive	35
8	7.8	8.7	19.35	Frictional	
9	8.7	10.5	18.33	Cohesive	35
10	10.5	10.8	19.35	Frictional	
11	10.8	16.2	19.35	Frictional	41
12	16.2	16.6	19.35	Frictional	
13	16.6	18.7	19.35	Frictional	41
14	18.7	18.9	19.35	Frictional	
15	18.9	21.2	19.35	Frictional	41
16	21.2	22.3	19.35	Frictional	
17	22.3	23.3	19.35	Frictional	41
18	23.3	23.6	19.35	Frictional	
19	23.6	23.8	19.35	Frictional	41
20	23.8	25.0	19.35	Frictional	

2.1.6.3.1 Palo di diametro d=1.2m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	VERO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	4374		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ_2
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8760	1645	1224	1224

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	VERO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2749		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8760	1543	897	897

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.2**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	VERO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1736		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
8760	1492	657	657

2.1.6.3.2 Palo di diametro d=1.0m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	VERO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	2715		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7347	1333	874	874

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	VERO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1751		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7347	1291	656	656

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**1.0**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	VERO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	933		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	Seleziona per applicare ξ
ξ_2	1.31	
ξ	**1.475**	FALSO

Results

$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
7347	1248	417	417

2.1.6.3.3 Palo di diametro d=0.8m

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)	3800		
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	VERO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	1487		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5878	1033	545	545

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	FALSO
	20 Φ 24	982	VERO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	982		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5878	999	419	419

Select to account for the water table	VERO
z_w (m)	**1**
Pile geometry	
d_{palo}(m)	**0.8**
L_{palo}(m)	**15.0**
number of piles	**1**

Structural section Yielding moment			
My (kN m)		3800	
Select reinforcement from suggested	VERO		
d (m)	Reinforcement	My (kN m)	Select your option
0.4	6 Φ 16	62	FALSO
	8 Φ 20	111	FALSO
	8 Φ 24	149	FALSO
0.5	6 Φ 16	89	FALSO
	8 Φ 20	163	FALSO
	8 Φ 24	218	FALSO
0.6	8 Φ 16	153	FALSO
	12 Φ 24	407	FALSO
	12 Φ 30	579	FALSO
0.8	10 Φ 20	431	VERO
	20 Φ 24	982	FALSO
	22 Φ 30	1487	FALSO
1	16 Φ 20	933	FALSO
	22 Φ 26	1751	FALSO
	30 Φ 30	2715	FALSO
1.2	16 Φ 24	1736	FALSO
	26 Φ 26	2749	FALSO
	38 Φ 30	4374	FALSO
1.5	24 Φ 24	3643	FALSO
	40 Φ 26	5617	FALSO
	44 Φ 30	7158	FALSO
My_{cal} (kN m)	431		

Design Horizontal effort	
E_d (kN)	**-**
Select reduction factor for group effect (0.5)	**1**

Applica coefficienti da NTC 2018	VERO	
γ_T resistenza a carichi trasversali	1.3	
Numero verticali indagate	**6**	
ξ_1	1.475	
ξ_2	1.31	Seleziona per applicare ξ
ξ	**1.475**	FALSO

Results			
$H_{lim,short}$ (kN)	$H_{lim,int}$ (kN)	$H_{lim,long}$ (kN)	$H_{lim,d}$ (kN)
5878	965	215	215

3 Integrazione capacità portante pali torri dissipative

Così come richiamato al Paragrafo 5.1.3 della Relazione geotecnica, il carico limite verticale dei pali è stato calcolato in accordo con le prescrizioni al Paragrafo 6.4.3.1.1 delle Norme Tecniche per le Costruzioni (NTC2028) "Resistenze di pali soggetti a carichi assiali". I pali di fondazione previsti per la fondazione delle torri dissipative hanno tutti lunghezza 15m con diametro pari a 0.8m.

Il valore di progetto R_d della resistenza si ottiene a partire dal valore caratteristico R_k applicando i coefficienti parziali γ_R della Tab. 6.4.II delle NTC riportata di seguito.

Tabella 3-1 Coefficienti parziali γ_R da applicare alle resistenze caratteristiche a carico verticale dei pali (Tab. 6.4.II delle NTC).

Resistenza	Simbolo	Pali infissi	Pali trivellati	Pali ad elica continua
	γ_R	(R3)	(R3)	(R3)
Base	γ_b	1,15	1,35	1,3
Laterale in compressione	γ_s	1,15	1,15	1,15
Totale (*)	γ	1,15	1,30	1,25
Laterale in trazione	γ_{st}	1,25	1,25	1,25

(*) da applicare alle resistenze caratteristiche dedotte dai risultati di prove di carico di progetto.

Essendo il carico limite dei pali calcolato con riferimento a procedure analitiche che prevedono l'utilizzo dei parametri geotecnici o dei risultati di prove in sito, il valore caratteristico della resistenza a compressione $R_{c,k}$ (o a trazione $R_{t,k}$) è dato dal minore dei valori ottenuti applicando al valore medio e al valore minimo delle resistenze calcolate $R_{c,cal}$ ($R_{t,cal}$) i fattori di correlazione ξ riportati nella Tab. 6.4.IV delle NTC (tab. 1-2 della presente relazione), in funzione del numero n di verticali di indagine:

$$R_{c,k} = Min\left\{\frac{(R_{c,cal})_{media}}{\xi_3}; \frac{(R_{c,cal})_{min}}{\xi_4}\right\} \qquad [1]$$

$$R_{t,k} = Min\left\{\frac{(R_{t,cal})_{media}}{\xi_3}; \frac{(R_{t,cal})_{min}}{\xi_4}\right\} \qquad [22]$$

Tabella 3-2 Fattori di correlazione ξ per la determinazione della resistenza caratteristica in funzione del numero di verticali indagate (Tab. 6.4.IV delle NTC)

Numero di verticali indagate	1	2	3	4	5	7	≥ 10
ξ_3	1,70	1,65	1,60	1,55	1,50	1,45	1,40
ξ_4	1,70	1,55	1,48	1,42	1,34	1,28	1,21

Si precisa che la verifica in condizioni sismiche è stata eseguita assumendo che gli strati sabbiosi risultati liquefacibili dalla specifica analisi riportata al Capitolo 4 della relazione geotecnica non contribuiscano alla resistenza dei pali (ponendo angolo d'attrito φ=0).
Il valore del carico limite verticale di progetto, calcolato come precedentemente illustrato, è riportato in grassetto nell'ultima colonna della Tabella 1-3 e della Tabella 1-4. Gli output di calcolo sono riportati nei paragrafi seguenti.

Tabella 3-3 Carico limite calcolato per la sollecitazione di compressione nella condizione sismica.

COMPRESSIONE		
d (m)	CPTu8	**R_d (kN)**
0.8	4427	**2604**

Tabella 3-4 Carico limite calcolato per la sollecitazione di trazione nella condizione sismica.

SFILAMENTO		
d (m)	CPTu8	**R_d (kN)**
0.8	1564	**920**

3.1 Calcolo del carico limite con riferimento alla prova CPTu8

Modello geotecnico di sottosuolo								
ID strato	**z_{min} (m)**	**z_{max} (m)**	**γ (kN/m^3)**	**ϕ' (°)**	**c_u (kPa)**	α	k	tan δ
1	0.0	2.4	19.4	-		0.70	0.50	0.00
2	2.4	4.4	19.4	-		0.70	0.50	0.00
3	4.4	5.2	18.3	22	25	0.70	0.50	0.40
4	5.2	5.9	19.4	-		0.70	0.50	0.00
5	5.9	9.8	18.3	22	30	0.66	0.50	0.40
6	9.8	10.6	19.4	34		0.70	0.50	0.67
7	10.6	11.6	18.3	22	50	0.50	0.50	0.40
8	11.6	11.8	19.4	-		0.70	0.50	0.00
9	11.8	13.4	19.4	41		0.70	0.50	0.86
10	13.4	14.5	19.4	-		0.70	0.50	0.00
11	14.5	16.2	19.4	41		0.70	0.50	0.86
12	16.2	17.2	19.4	-		0.70	0.50	0.00
13	17.2	19.8	19.4	41		0.70	0.50	0.86
14	19.8	26.0	19.4	-		0.70	0.50	0.00
15	26.0	27.9	18.3	22	175	0.35	0.50	0.40

3.1.1 Calcolo per sollecitazioni di compressione

Seleziona per inserire la falda	VERO	
z_w (m)	**3.2**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**4.2**	
Scgli tecnologia costruttiva	**Elica continua**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Compressione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.3	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**1**	
ξ_3	1.7	
ξ_4	1.7	Seleziona per applicare ξ
ξ	**1.7**	FALSO
Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	4427	-

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	L/D	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.6	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.7	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.8	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.9	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.0	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.1	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.2	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.3	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.5	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.8	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.9	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.0	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.1	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.2	0.0	2	0.70	0.70	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.3	0.1	2	0.70	0.70	0.00	0.00	0.13	0.00	0.8	0.00	0.00	0.00	0.00	88.77	0.00	0.00	0.00	0.00	132.68
4.4	0.2	2	0.70	0.70	0.00	0.00	0.25	0.00	1.5	0.00	0.00	0.00	0.00	88.01	0.00	0.00	0.00	0.00	131.92

Breve termine

Lungo termine

Palo

4.5	0.3	3	0.70	0.70	0.40	22.00	0.38	6.15	2.3	17.50	4.40	311.97	156.81	91.07	20.99	5.28	456.21	229.32	135.74
4.6	0.4	3	0.70	0.70	0.40	22.00	0.50	6.15	3.1	17.50	8.80	313.81	157.74	83.16	21.23	10.61	461.45	231.95	123.58
4.7	0.5	3	0.70	0.70	0.40	22.00	0.63	6.15	3.8	17.50	13.19	315.64	158.66	75.19	21.47	16.01	466.69	234.58	111.29
4.8	0.6	3	0.70	0.70	0.40	22.00	0.75	6.15	4.6	17.50	17.59	317.47	159.58	67.16	21.71	21.47	471.92	237.21	98.87
4.9	0.7	3	0.70	0.70	0.40	22.00	0.88	6.15	5.3	17.50	21.99	319.31	160.50	59.06	21.95	26.98	477.16	239.85	86.31
5.0	0.8	3	0.70	0.70	0.40	22.00	1.00	6.15	6.1	17.50	26.39	321.14	161.42	64.44	22.20	32.56	482.40	242.48	92.58
5.1	0.9	3	0.70	0.70	0.40	22.00	1.13	6.15	6.9	17.50	30.79	322.97	162.34	69.81	22.44	38.20	487.63	245.11	98.90
5.2	1.0	3	0.70	0.70	0.40	22.00	1.25	6.15	7.6	17.50	35.19	324.80	163.26	75.19	22.68	43.90	492.87	247.74	105.27
5.3	1.1	4	0.70	0.70	0.00	0.00	1.38	0.00	8.4	0.00	35.19	0.00	0.00	76.74	0.00	43.90	0.00	0.00	106.69
5.4	1.2	4	0.70	0.70	0.00	0.00	1.50	0.00	9.2	0.00	35.19	0.00	0.00	89.78	0.00	43.90	0.00	0.00	125.61
5.5	1.3	4	0.70	0.70	0.00	0.00	1.63	0.00	9.9	0.00	35.19	0.00	0.00	102.87	0.00	43.90	0.00	0.00	144.72
5.6	1.4	4	0.70	0.70	0.00	0.00	1.75	0.00	10.7	0.00	35.19	0.00	0.00	116.04	0.00	43.90	0.00	0.00	164.01
5.7	1.5	4	0.70	0.70	0.00	0.00	1.88	0.00	11.5	0.00	35.19	0.00	0.00	129.26	0.00	43.90	0.00	0.00	183.49
5.8	1.6	4	0.70	0.70	0.00	0.00	2.00	0.00	12.2	0.00	35.19	0.00	0.00	142.55	0.00	43.90	0.00	0.00	203.15
5.9	1.7	4	0.70	0.70	0.00	0.00	2.13	0.00	13.0	0.00	35.19	0.00	0.00	155.91	0.00	43.90	0.00	0.00	222.99
6.0	1.8	5	0.66	0.70	0.40	22.00	2.25	6.15	13.7	19.80	40.16	385.18	193.61	173.66	24.81	50.13	539.16	271.01	248.45
6.1	1.9	5	0.66	0.70	0.40	22.00	2.38	6.15	14.5	19.80	45.14	387.02	194.53	177.93	25.05	56.43	544.39	273.64	255.18
6.2	2.0	5	0.66	0.70	0.40	22.00	2.50	6.15	15.3	19.80	50.11	388.85	195.46	182.20	25.29	62.79	549.63	276.27	261.97
6.3	2.1	5	0.66	0.70	0.40	22.00	2.63	6.15	16.0	19.80	55.09	390.68	196.38	186.47	25.53	69.20	554.87	278.91	268.81
6.4	2.2	5	0.66	0.70	0.40	22.00	2.75	6.15	16.8	19.80	60.07	392.51	197.30	190.75	25.77	75.68	560.10	281.54	275.70
6.5	2.3	5	0.66	0.70	0.40	22.00	2.88	6.15	17.6	19.80	65.04	394.35	198.22	195.02	26.01	82.22	565.34	284.17	282.65
6.6	2.4	5	0.66	0.70	0.40	22.00	3.00	6.15	18.3	19.80	70.02	396.18	199.14	199.29	26.25	88.81	570.58	286.80	289.65
6.7	2.5	5	0.66	0.70	0.40	22.00	3.13	6.15	19.1	19.80	75.00	398.01	200.06	203.56	26.49	95.47	575.81	289.44	296.70
6.8	2.6	5	0.66	0.70	0.40	22.00	3.25	6.15	19.9	19.80	79.97	399.85	200.98	207.84	26.73	102.19	581.05	292.07	303.80
6.9	2.7	5	0.66	0.70	0.40	22.00	3.38	6.15	20.6	19.80	84.95	401.68	201.91	212.11	26.98	108.97	586.29	294.70	310.96
7.0	2.8	5	0.66	0.70	0.40	22.00	3.50	6.15	21.4	19.80	89.92	403.51	202.83	216.38	27.22	115.81	591.53	297.33	318.17
7.1	2.9	5	0.66	0.70	0.40	22.00	3.63	6.15	22.1	19.80	94.90	405.35	203.75	220.65	27.46	122.71	596.76	299.97	325.43
7.2	3.0	5	0.66	0.70	0.40	22.00	3.75	6.15	22.9	19.80	99.88	407.18	204.67	224.93	27.70	129.68	602.00	302.60	332.75
7.3	3.1	5	0.66	0.70	0.40	22.00	3.88	6.15	23.7	19.80	104.85	409.01	205.59	229.20	27.94	136.70	607.24	305.23	340.11
7.4	3.2	5	0.66	0.70	0.40	22.00	4.00	6.15	24.4	19.80	109.83	410.84	206.51	233.47	28.18	143.78	612.47	307.86	347.53
7.5	3.3	5	0.66	0.70	0.40	22.00	4.13	6.15	25.2	19.80	114.81	412.68	207.43	237.74	28.42	150.92	617.71	310.50	355.01
7.6	3.4	5	0.66	0.70	0.40	22.00	4.25	6.15	26.0	19.80	119.78	414.51	208.36	242.02	28.66	158.13	622.95	313.13	362.53
7.7	3.5	5	0.66	0.70	0.40	22.00	4.38	6.15	26.7	19.80	124.76	416.34	209.28	246.29	28.90	165.39	628.18	315.76	370.11
7.8	3.6	5	0.66	0.70	0.40	22.00	4.50	6.15	27.5	19.80	129.74	418.18	210.20	250.56	29.14	172.72	633.42	318.39	377.74
7.9	3.7	5	0.66	0.70	0.40	22.00	4.63	6.15	28.3	19.80	134.71	420.01	211.12	254.83	29.39	180.10	638.66	321.02	385.43
8.0	3.8	5	0.66	0.70	0.40	22.00	4.75	6.15	29.0	19.80	139.69	421.84	212.04	259.11	29.63	187.55	643.90	323.66	393.16
8.1	3.9	5	0.66	0.70	0.40	22.00	4.88	6.15	29.8	19.80	144.66	423.68	212.96	263.38	29.87	195.05	649.13	326.29	400.95
8.2	4.0	5	0.66	0.70	0.40	22.00	5.00	6.15	30.5	19.80	149.64	425.51	213.88	267.65	30.11	202.62	654.37	328.92	408.79
8.3	4.1	5	0.66	0.70	0.40	22.00	5.13	6.15	31.3	19.80	154.62	427.34	214.81	271.92	30.35	210.25	659.61	331.55	416.69
8.4	4.2	5	0.66	0.70	0.40	22.00	5.25	6.15	32.1	19.80	159.59	429.17	215.73	276.20	30.59	217.94	664.84	334.19	424.63
8.5	4.3	5	0.66	0.70	0.40	22.00	5.38	6.15	32.8	19.80	164.57	431.01	216.65	280.47	30.83	225.68	670.08	336.82	432.63
8.6	4.4	5	0.66	0.70	0.40	22.00	5.50	6.15	33.6	19.80	169.55	432.84	217.57	284.74	31.07	233.49	675.32	339.45	440.68
8.7	4.5	5	0.66	0.70	0.40	22.00	5.63	6.15	34.4	19.80	174.52	434.67	218.49	289.01	31.31	241.36	680.55	342.08	448.79
8.8	4.6	5	0.66	0.70	0.40	22.00	5.75	6.15	35.1	19.80	179.50	436.51	219.41	293.28	31.55	249.29	685.79	344.72	456.95
8.9	4.7	5	0.66	0.70	0.40	22.00	5.88	6.15	35.9	19.80	184.47	438.34	220.33	410.24	31.80	257.29	691.03	347.35	567.76
9.0	4.8	5	0.66	0.70	0.40	22.00	6.00	6.15	36.6	19.80	189.45	440.17	221.25	528.15	32.04	265.34	696.27	349.98	679.47
9.1	4.9	5	0.66	0.70	0.40	22.00	6.13	6.15	37.4	19.80	194.43	442.01	222.18	647.01	32.28	273.45	701.50	352.61	792.05

9.2	5.0	5	0.66	0.70	0.40	22.00	6.25	6.15	38.2	19.80	199.40	443.84	223.10	766.82	32.52	281.62	706.74	355.25	905.52
9.3	5.1	5	0.66	0.70	0.40	22.00	6.38	6.15	38.9	19.80	204.38	445.67	224.02	887.58	32.76	289.85	711.98	357.88	1019.87
9.4	5.2	5	0.66	0.70	0.40	22.00	6.50	6.15	39.7	19.80	209.36	447.50	224.94	1009.30	33.00	298.15	717.21	360.51	1135.11
9.5	5.3	5	0.66	0.70	0.40	22.00	6.63	6.15	40.5	19.80	214.33	449.34	225.86	1131.96	33.24	306.50	722.45	363.14	1251.22
9.6	5.4	5	0.66	0.70	0.40	22.00	6.75	6.15	41.2	19.80	219.31	451.17	226.78	1255.57	33.48	314.92	727.69	365.78	1368.22
9.7	5.5	5	0.66	0.70	0.40	22.00	6.88	6.15	42.0	19.80	224.28	453.00	227.70	1266.20	33.72	323.39	732.93	368.41	1377.01
9.8	5.6	5	0.66	0.70	0.40	22.00	7.00	6.15	42.8	19.80	229.26	454.84	228.63	1276.82	33.96	331.93	738.16	371.04	1385.83
9.9	5.7	6	0.70	0.70	0.67	33.80	7.13	30.26	43.5	56.72	243.52	3662.50	1840.97	1295.52	56.72	346.18	3662.50	1840.97	1399.59
10.0	5.8	6	0.70	0.70	0.67	33.80	7.25	30.26	44.3	57.17	257.88	3691.36	1855.48	1201.63	57.17	360.55	3691.36	1855.48	1310.83
10.1	5.9	6	0.70	0.70	0.67	33.80	7.38	30.26	45.0	57.62	272.37	3720.23	1869.99	1106.88	57.62	375.03	3720.23	1869.99	1221.30
10.2	6.0	6	0.70	0.70	0.67	33.80	7.50	30.26	45.8	58.06	286.96	3749.10	1884.50	1011.29	58.06	389.63	3749.10	1884.50	1131.02
10.3	6.1	6	0.70	0.70	0.67	33.80	7.63	30.26	46.6	58.51	301.66	3777.96	1899.01	914.84	58.51	404.33	3777.96	1899.01	1039.99
10.4	6.2	6	0.70	0.70	0.67	33.80	7.75	30.26	47.3	58.96	316.48	3806.83	1913.52	817.54	58.96	419.15	3806.83	1913.52	948.19
10.5	6.3	6	0.70	0.70	0.67	33.80	7.88	30.26	48.1	59.40	331.41	3835.69	1928.03	719.38	59.40	434.08	3835.69	1928.03	855.64
10.6	6.4	6	0.70	0.70	0.67	33.80	8.00	30.26	48.9	59.85	346.45	3864.56	1942.54	620.37	59.85	449.12	3864.56	1942.54	762.33
10.7	6.5	7	0.50	0.70	0.40	22.00	8.13	6.14	49.6	25.00	352.74	652.15	327.81	489.23	36.36	458.26	789.69	396.94	633.67
10.8	6.6	7	0.50	0.70	0.40	22.00	8.25	6.14	50.4	25.00	359.02	653.98	328.73	471.01	36.60	467.46	794.29	399.26	613.15
10.9	6.7	7	0.50	0.70	0.40	22.00	8.38	6.13	51.2	25.00	365.30	655.82	329.65	745.45	36.85	476.72	798.89	401.56	885.25
11.0	6.8	7	0.50	0.70	0.40	22.00	8.50	6.13	51.9	25.00	371.59	657.65	330.57	1021.66	37.09	486.04	803.47	403.87	1159.07
11.1	6.9	7	0.50	0.70	0.40	22.00	8.63	6.12	52.7	25.00	377.87	659.48	331.49	1299.64	37.33	495.42	808.04	406.16	1434.62
11.2	7.0	7	0.50	0.70	0.40	22.00	8.75	6.12	53.4	25.00	384.15	661.31	332.41	1579.38	37.57	504.86	812.59	408.45	1711.89
11.3	7.1	7	0.50	0.70	0.40	22.00	8.88	6.11	54.2	25.00	390.44	663.15	333.33	1860.89	37.81	514.37	817.14	410.74	1990.88
11.4	7.2	7	0.50	0.70	0.40	22.00	9.00	6.11	55.0	25.00	396.72	664.98	334.26	2144.15	38.05	523.93	821.67	413.02	2271.58
11.5	7.3	7	0.50	0.70	0.40	22.00	9.13	6.10	55.7	25.00	403.00	666.81	335.18	2429.17	38.29	533.55	826.20	415.29	2553.99
11.6	7.4	7	0.50	0.70	0.40	22.00	9.25	6.10	56.5	25.00	409.29	668.65	336.10	2715.94	38.53	543.24	830.71	417.56	2838.11
11.7	7.5	8	0.70	0.70	0.00	0.00	9.38	0.00	57.3	0.00	409.29	0.00	0.00	2998.99	0.00	543.24	0.00	0.00	3115.47
11.8	7.6	8	0.70	0.70	0.00	0.00	9.50	0.00	58.0	0.00	409.29	0.00	0.00	3307.35	0.00	543.24	0.00	0.00	3423.83
11.9	7.7	9	0.70	0.70	0.86	40.70	9.63	59.87	58.8	83.75	430.34	8327.77	4186.00	3635.81	83.75	564.29	8327.77	4186.00	3752.29
12.0	7.8	9	0.70	0.70	0.86	40.70	9.75	59.83	59.6	84.33	451.53	8380.03	4212.26	3673.48	84.33	585.48	8380.03	4212.26	3789.96
12.1	7.9	9	0.70	0.70	0.86	40.70	9.88	59.80	60.3	84.90	472.87	8432.17	4238.47	3711.22	84.90	606.82	8432.17	4238.47	3827.70
12.2	8.0	9	0.70	0.70	0.86	40.70	10.00	59.76	61.1	85.48	494.35	8484.22	4264.63	3749.05	85.48	628.30	8484.22	4264.63	3865.53
12.3	8.1	9	0.70	0.70	0.86	40.70	10.13	59.73	61.8	86.05	515.98	8536.15	4290.74	3786.97	86.05	649.93	8536.15	4290.74	3903.45
12.4	8.2	9	0.70	0.70	0.86	40.70	10.25	59.69	62.6	86.63	537.75	8587.98	4316.79	3824.96	86.63	671.70	8587.98	4316.79	3941.44
12.5	8.3	9	0.70	0.70	0.86	40.70	10.38	59.65	63.4	87.20	559.66	8639.71	4342.79	3541.38	87.20	693.62	8639.71	4342.79	3657.86
12.6	8.4	9	0.70	0.70	0.86	40.70	10.50	59.62	64.1	87.77	581.72	8691.32	4368.73	3256.11	87.77	715.68	8691.32	4368.73	3372.59
12.7	8.5	9	0.70	0.70	0.86	40.70	10.63	59.58	64.9	88.35	603.93	8742.82	4394.62	2969.15	88.35	737.88	8742.82	4394.62	3085.63
12.8	8.6	9	0.70	0.70	0.86	40.70	10.75	59.55	65.7	88.92	626.28	8794.22	4420.46	2680.50	88.92	760.23	8794.22	4420.46	2796.98
12.9	8.7	9	0.70	0.70	0.86	40.70	10.88	59.51	66.4	89.50	648.77	8845.50	4446.23	2390.18	89.50	782.72	8845.50	4446.23	2506.66
13.0	8.8	9	0.70	0.70	0.86	40.70	11.00	59.47	67.2	90.07	671.41	8896.67	4471.96	2098.17	90.07	805.36	8896.67	4471.96	2214.65
13.1	8.9	9	0.70	0.70	0.86	40.70	11.13	59.43	68.0	90.65	694.19	8947.73	4497.62	1804.49	90.65	828.14	8947.73	4497.62	1920.97
13.2	9.0	9	0.70	0.70	0.86	40.70	11.25	59.39	68.7	91.22	717.12	8998.68	4523.23	1509.15	91.22	851.07	8998.68	4523.23	1625.63
13.3	9.1	9	0.70	0.70	0.86	40.70	11.38	59.36	69.5	91.80	740.19	9049.50	4548.78	1212.14	91.80	874.14	9049.50	4548.78	1328.62
13.4	9.2	9	0.70	0.70	0.86	40.70	11.50	59.32	70.2	92.37	763.40	9100.22	4574.27	913.46	92.37	897.36	9100.22	4574.27	1029.94
13.5	9.3	10	0.70	0.70	0.00	0.00	11.63	0.00	71.0	0.00	763.40	0.00	0.00	592.82	0.00	897.36	0.00	0.00	709.30
13.6	9.4	10	0.70	0.70	0.00	0.00	11.75	0.00	71.8	0.00	763.40	0.00	0.00	933.00	0.00	897.36	0.00	0.00	1049.48
13.7	9.5	10	0.70	0.70	0.00	0.00	11.88	0.00	72.5	0.00	763.40	0.00	0.00	1274.90	0.00	897.36	0.00	0.00	1391.38
13.8	9.6	10	0.70	0.70	0.00	0.00	12.00	0.00	73.3	0.00	763.40	0.00	0.00	1618.53	0.00	897.36	0.00	0.00	1735.01

13.9	9.7	10	0.70	0.70	0.00	0.00	12.13	0.00	74.1	0.00	763.40	0.00	0.00	1963.87	0.00	897.36	0.00	0.00	2080.35
14.0	9.8	10	0.70	0.70	0.00	0.00	12.25	0.00	74.8	0.00	763.40	0.00	0.00	2310.93	0.00	897.36	0.00	0.00	2427.41
14.1	9.9	10	0.70	0.70	0.00	0.00	12.38	0.00	75.6	0.00	763.40	0.00	0.00	2659.69	0.00	897.36	0.00	0.00	2776.17
14.2	10.0	10	0.70	0.70	0.00	0.00	12.50	0.00	76.4	0.00	763.40	0.00	0.00	3010.16	0.00	897.36	0.00	0.00	3126.64
14.3	10.1	10	0.70	0.70	0.00	0.00	12.63	0.00	77.1	0.00	763.40	0.00	0.00	3362.33	0.00	897.36	0.00	0.00	3478.81
14.4	10.2	10	0.70	0.70	0.00	0.00	12.75	0.00	77.9	0.00	763.40	0.00	0.00	3716.19	0.00	897.36	0.00	0.00	3832.67
14.5	10.3	10	0.70	0.70	0.00	0.00	12.88	0.00	78.6	0.00	763.40	0.00	0.00	4071.74	0.00	897.36	0.00	0.00	4188.22
14.6	10.4	11	0.70	0.70	0.86	40.70	13.00	58.83	79.4	99.26	788.35	9699.41	4875.45	4450.67	99.26	922.30	9699.41	4875.45	4567.15
14.7	10.5	11	0.70	0.70	0.86	40.70	13.13	58.79	80.2	99.84	813.44	9748.53	4900.15	4490.47	99.84	947.39	9748.53	4900.15	4606.95
14.8	10.6	11	0.70	0.70	0.86	40.70	13.25	58.75	80.9	100.41	838.68	9797.52	4924.77	4530.33	100.41	972.63	9797.52	4924.77	4646.81
14.9	10.7	11	0.70	0.70	0.86	40.70	13.38	58.71	81.7	100.99	864.06	9846.39	4949.33	4570.28	100.99	998.01	9846.39	4949.33	4686.76
15.0	10.8	11	0.70	0.70	0.86	40.70	13.50	58.66	82.5	101.56	889.58	9895.12	4973.83	4610.29	101.56	1023.54	9895.12	4973.83	4726.77
15.1	10.9	11	0.70	0.70	0.86	40.70	13.63	58.62	83.2	102.13	915.25	9943.72	4998.26	4650.38	102.13	1049.21	9943.72	4998.26	4766.86
15.2	11.0	11	0.70	0.70	0.86	40.70	13.75	58.58	84.0	102.71	941.07	9992.19	5022.62	4690.54	102.71	1075.02	9992.19	5022.62	4807.02
15.3	11.1	11	0.70	0.70	0.86	40.70	13.88	58.53	84.8	103.28	967.02	10040.52	5046.92	4361.11	103.28	1100.98	10040.52	5046.92	4477.59
15.4	11.2	11	0.70	0.70	0.86	40.70	14.00	58.49	85.5	103.86	993.13	10088.72	5071.15	4030.12	103.86	1127.08	10088.72	5071.15	4146.60
15.5	11.3	11	0.70	0.70	0.86	40.70	14.13	58.44	86.3	104.43	1019.37	10136.79	5095.30	3697.55	104.43	1153.33	10136.79	5095.30	3814.03
15.6	11.4	11	0.70	0.70	0.86	40.70	14.25	58.40	87.0	105.01	1045.76	10184.71	5119.40	3363.42	105.01	1179.72	10184.71	5119.40	3479.90
15.7	11.5	11	0.70	0.70	0.86	40.70	14.38	58.35	87.8	105.58	1072.30	10232.50	5143.42	3027.73	105.58	1206.25	10232.50	5143.42	3144.21
15.8	11.6	11	0.70	0.70	0.86	40.70	14.50	58.31	88.6	106.16	1098.98	10280.15	5167.37	2690.49	106.16	1232.93	10280.15	5167.37	2806.97
15.9	11.7	11	0.70	0.70	0.86	40.70	14.63	58.26	89.3	106.73	1125.80	10327.66	5191.25	2351.69	106.73	1259.76	10327.66	5191.25	2468.17
16.0	11.8	11	0.70	0.70	0.86	40.70	14.75	58.22	90.1	107.30	1152.77	10375.03	5215.06	2011.36	107.30	1286.72	10375.03	5215.06	2127.84
16.1	11.9	11	0.70	0.70	0.86	40.70	14.88	58.17	90.9	107.88	1179.89	10422.26	5238.80	1669.48	107.88	1313.84	10422.26	5238.80	1785.96
16.2	12.0	11	0.70	0.70	0.86	40.70	15.00	58.12	91.6	108.45	1207.14	10469.34	5262.47	1326.07	108.45	1341.09	10469.34	5262.47	1442.55
16.3	12.1	12	0.70	0.70	0.00	0.00	15.13	0.00	92.4	0.00	1207.14	0.00	0.00	1343.56	0.00	1341.09	0.00	0.00	1460.04
16.4	12.2	12	0.70	0.70	0.00	0.00	15.25	0.00	93.2	0.00	1207.14	0.00	0.00	1730.78	0.00	1341.09	0.00	0.00	1847.26
16.5	12.3	12	0.70	0.70	0.00	0.00	15.38	0.00	93.9	0.00	1207.14	0.00	0.00	2119.72	0.00	1341.09	0.00	0.00	2236.20
16.6	12.4	12	0.70	0.70	0.00	0.00	15.50	0.00	94.7	0.00	1207.14	0.00	0.00	2510.39	0.00	1341.09	0.00	0.00	2626.87
16.7	12.5	12	0.70	0.70	0.00	0.00	15.63	0.00	95.4	0.00	1207.14	0.00	0.00	2902.79	0.00	1341.09	0.00	0.00	3019.27
16.8	12.6	12	0.70	0.70	0.00	0.00	15.75	0.00	96.2	0.00	1207.14	0.00	0.00	3296.90	0.00	1341.09	0.00	0.00	3413.38
16.9	12.7	12	0.70	0.70	0.00	0.00	15.88	0.00	97.0	0.00	1207.14	0.00	0.00	3692.73	0.00	1341.09	0.00	0.00	3809.21
17.0	12.8	12	0.70	0.70	0.00	0.00	16.00	0.00	97.7	0.00	1207.14	0.00	0.00	4090.28	0.00	1341.09	0.00	0.00	4206.76
17.1	12.9	12	0.70	0.70	0.00	0.00	16.13	0.00	98.5	0.00	1207.14	0.00	0.00	4489.54	0.00	1341.09	0.00	0.00	4606.02
17.2	13.0	12	0.70	0.70	0.00	0.00	16.25	0.00	99.3	0.00	1207.14	0.00	0.00	4890.51	0.00	1341.09	0.00	0.00	5006.99
17.3	13.1	13	0.70	0.70	0.86	40.70	16.38	57.65	100.0	114.77	1235.99	10988.56	5523.45	5318.28	114.77	1369.94	10988.56	5523.45	5434.76
17.4	13.2	13	0.70	0.70	0.86	40.70	16.50	57.62	100.8	115.35	1264.98	11037.72	5548.16	5361.63	115.35	1398.93	11037.72	5548.16	5478.11
17.5	13.3	13	0.70	0.70	0.86	40.70	16.63	57.59	101.5	115.92	1294.11	11086.82	5572.85	5405.08	115.92	1428.06	11086.82	5572.85	5521.56
17.6	13.4	13	0.70	0.70	0.86	40.70	16.75	57.56	102.3	116.49	1323.39	11135.87	5597.50	5448.63	116.49	1457.34	11135.87	5597.50	5565.11
17.7	13.5	13	0.70	0.70	0.86	40.70	16.88	57.52	103.1	117.07	1352.81	11184.87	5622.13	5492.29	117.07	1486.76	11184.87	5622.13	5608.77
17.8	13.6	13	0.70	0.70	0.86	40.70	17.00	57.49	103.8	117.64	1382.38	11233.81	5646.73	5536.06	117.64	1516.33	11233.81	5646.73	5652.54
17.9	13.7	13	0.70	0.70	0.86	40.70	17.13	57.46	104.6	118.22	1412.09	11282.69	5671.30	5579.93	118.22	1546.04	11282.69	5671.30	5696.41
18.0	13.8	13	0.70	0.70	0.86	40.70	17.25	57.43	105.4	118.79	1441.95	11331.52	5695.85	5623.90	118.79	1575.90	11331.52	5695.85	5740.38
18.1	13.9	13	0.70	0.70	0.86	40.70	17.38	57.40	106.1	119.37	1471.95	11380.30	5720.36	5667.98	119.37	1605.90	11380.30	5720.36	5784.46
18.2	14.0	13	0.70	0.70	0.86	40.70	17.50	57.37	106.9	119.94	1502.09	11429.02	5744.85	5712.16	119.94	1636.04	11429.02	5744.85	5828.64
18.3	14.1	13	0.70	0.70	0.86	40.70	17.63	57.34	107.7	120.52	1532.38	11477.69	5769.31	5756.44	120.52	1666.33	11477.69	5769.31	5872.92
18.4	14.2	13	0.70	0.70	0.86	40.70	17.75	57.31	108.4	121.09	1562.81	11526.30	5793.75	5800.83	121.09	1696.76	11526.30	5793.75	5917.31
18.5	14.3	13	0.70	0.70	0.86	40.70	17.88	57.28	109.2	121.66	1593.39	11574.85	5818.16	5845.33	121.66	1727.34	11574.85	5818.16	5961.81

18.6	14.4	13	0.70	0.70	0.86	40.70	18.00	57.25	109.9	122.24	1624.11	11623.36	5842.54	5889.93	122.24	1758.06	11623.36	5842.54	6006.41
18.7	14.5	13	0.70	0.70	0.86	40.70	18.13	57.22	110.7	122.81	1654.98	11671.80	5866.89	5934.63	122.81	1788.93	11671.80	5866.89	6051.11
18.8	14.6	13	0.70	0.70	0.86	40.70	18.25	57.19	111.5	123.39	1685.99	11720.20	5891.21	5979.44	123.39	1819.94	11720.20	5891.21	6095.92
18.9	14.7	13	0.70	0.70	0.86	40.70	18.38	57.16	112.2	123.96	1717.14	11768.54	5915.51	5593.80	123.96	1851.10	11768.54	5915.51	5710.28
19.0	14.8	13	0.70	0.70	0.86	40.70	18.50	57.13	113.0	124.54	1748.44	11816.82	5939.78	5206.58	124.54	1882.40	11816.82	5939.78	5323.06
19.1	14.9	13	0.70	0.70	0.86	40.70	18.63	57.10	113.8	125.11	1779.89	11865.05	5964.02	4817.79	125.11	1913.84	11865.05	5964.02	4934.27
19.2	15.0	13	0.70	0.70	0.86	40.70	18.75	57.07	114.5	125.68	1811.47	11913.23	5988.24	4427.43	125.68	1945.43	11913.23	5988.24	4543.91
19.3	15.1	13	0.70	0.70	0.86	40.70	18.88	57.04	115.3	126.26	1843.21	11961.35	6012.43	4035.50	126.26	1977.16	11961.35	6012.43	4151.98
19.4	15.2	13	0.70	0.70	0.86	40.70	19.00	57.01	116.1	126.83	1875.08	12009.42	6036.59	3642.01	126.83	2009.04	12009.42	6036.59	3758.48
19.5	15.3	13	0.70	0.70	0.86	40.70	19.13	56.98	116.8	127.41	1907.11	12057.43	6060.72	3246.95	127.41	2041.06	12057.43	6060.72	3363.43
19.6	15.4	13	0.70	0.70	0.86	40.70	19.25	56.95	117.6	127.98	1939.27	12105.39	6084.83	2850.33	127.98	2073.22	12105.39	6084.83	2966.81
19.7	15.5	13	0.70	0.70	0.86	40.70	19.38	56.92	118.3	128.56	1971.58	12153.29	6108.91	2452.15	128.56	2105.53	12153.29	6108.91	2568.63
19.8	15.6	13	0.70	0.70	0.86	40.70	19.50	56.89	119.1	129.13	2004.03	12201.14	6132.96	2052.41	129.13	2137.99	12201.14	6132.96	2168.89
19.9	15.7	14	0.70	0.70	0.00	0.00	19.63	0.00	119.9	0.00	2004.03	0.00	0.00	1622.76	0.00	2137.99	0.00	0.00	1739.24
20.0	15.8	14	0.70	0.70	0.00	0.00	19.75	0.00	120.6	0.00	2004.03	0.00	0.00	1622.00	0.00	2137.99	0.00	0.00	1738.48
20.1	15.9	14	0.70	0.70	0.00	0.00	19.88	0.00	121.4	0.00	2004.03	0.00	0.00	1621.24	0.00	2137.99	0.00	0.00	1737.72
20.2	16.0	14	0.70	0.70	0.00	0.00	20.00	0.00	122.2	0.00	2004.03	0.00	0.00	1620.47	0.00	2137.99	0.00	0.00	1736.95
20.3	16.1	14	0.70	0.70	0.00	0.00	20.13	0.00	122.9	0.00	2004.03	0.00	0.00	1619.71	0.00	2137.99	0.00	0.00	1736.19
20.4	16.2	14	0.70	0.70	0.00	0.00	20.25	0.00	123.7	0.00	2004.03	0.00	0.00	1618.95	0.00	2137.99	0.00	0.00	1735.43
20.5	16.3	14	0.70	0.70	0.00	0.00	20.38	0.00	124.5	0.00	2004.03	0.00	0.00	1618.18	0.00	2137.99	0.00	0.00	1734.66
20.6	16.4	14	0.70	0.70	0.00	0.00	20.50	0.00	125.2	0.00	2004.03	0.00	0.00	1617.42	0.00	2137.99	0.00	0.00	1733.90
20.7	16.5	14	0.70	0.70	0.00	0.00	20.63	0.00	126.0	0.00	2004.03	0.00	0.00	1616.66	0.00	2137.99	0.00	0.00	1733.14
20.8	16.6	14	0.70	0.70	0.00	0.00	20.75	0.00	126.7	0.00	2004.03	0.00	0.00	1615.89	0.00	2137.99	0.00	0.00	1732.37
20.9	16.7	14	0.70	0.70	0.00	0.00	20.88	0.00	127.5	0.00	2004.03	0.00	0.00	1615.13	0.00	2137.99	0.00	0.00	1731.61
21.0	16.8	14	0.70	0.70	0.00	0.00	21.00	0.00	128.3	0.00	2004.03	0.00	0.00	1614.37	0.00	2137.99	0.00	0.00	1730.85
21.1	16.9	14	0.70	0.70	0.00	0.00	21.13	0.00	129.0	0.00	2004.03	0.00	0.00	1613.60	0.00	2137.99	0.00	0.00	1730.08
21.2	17.0	14	0.70	0.70	0.00	0.00	21.25	0.00	129.8	0.00	2004.03	0.00	0.00	1612.84	0.00	2137.99	0.00	0.00	1729.32
21.3	17.1	14	0.70	0.70	0.00	0.00	21.38	0.00	130.6	0.00	2004.03	0.00	0.00	1612.08	0.00	2137.99	0.00	0.00	1728.55
21.4	17.2	14	0.70	0.70	0.00	0.00	21.50	0.00	131.3	0.00	2004.03	0.00	0.00	1611.31	0.00	2137.99	0.00	0.00	1727.79
21.5	17.3	14	0.70	0.70	0.00	0.00	21.63	0.00	132.1	0.00	2004.03	0.00	0.00	1610.55	0.00	2137.99	0.00	0.00	1727.03
21.6	17.4	14	0.70	0.70	0.00	0.00	21.75	0.00	132.9	0.00	2004.03	0.00	0.00	1609.78	0.00	2137.99	0.00	0.00	1726.26
21.7	17.5	14	0.70	0.70	0.00	0.00	21.88	0.00	133.6	0.00	2004.03	0.00	0.00	1609.02	0.00	2137.99	0.00	0.00	1725.50
21.8	17.6	14	0.70	0.70	0.00	0.00	22.00	0.00	134.4	0.00	2004.03	0.00	0.00	1608.26	0.00	2137.99	0.00	0.00	1724.74
21.9	17.7	14	0.70	0.70	0.00	0.00	22.13	0.00	135.1	0.00	2004.03	0.00	0.00	1607.49	0.00	2137.99	0.00	0.00	1723.97
22.0	17.8	14	0.70	0.70	0.00	0.00	22.25	0.00	135.9	0.00	2004.03	0.00	0.00	1606.73	0.00	2137.99	0.00	0.00	1723.21
22.1	17.9	14	0.70	0.70	0.00	0.00	22.38	0.00	136.7	0.00	2004.03	0.00	0.00	1605.97	0.00	2137.99	0.00	0.00	1722.45
22.2	18.0	14	0.70	0.70	0.00	0.00	22.50	0.00	137.4	0.00	2004.03	0.00	0.00	1605.20	0.00	2137.99	0.00	0.00	1721.68
22.3	18.1	14	0.70	0.70	0.00	0.00	22.63	0.00	138.2	0.00	2004.03	0.00	0.00	1604.44	0.00	2137.99	0.00	0.00	1720.92
22.4	18.2	14	0.70	0.70	0.00	0.00	22.75	0.00	139.0	0.00	2004.03	0.00	0.00	1603.68	0.00	2137.99	0.00	0.00	1720.16
22.5	18.3	14	0.70	0.70	0.00	0.00	22.88	0.00	139.7	0.00	2004.03	0.00	0.00	1602.91	0.00	2137.99	0.00	0.00	1719.39
22.6	18.4	14	0.70	0.70	0.00	0.00	23.00	0.00	140.5	0.00	2004.03	0.00	0.00	1602.15	0.00	2137.99	0.00	0.00	1718.63
22.7	18.5	14	0.70	0.70	0.00	0.00	23.13	0.00	141.3	0.00	2004.03	0.00	0.00	1601.39	0.00	2137.99	0.00	0.00	1717.87
22.8	18.6	14	0.70	0.70	0.00	0.00	23.25	0.00	142.0	0.00	2004.03	0.00	0.00	1600.62	0.00	2137.99	0.00	0.00	1717.10
22.9	18.7	14	0.70	0.70	0.00	0.00	23.38	0.00	142.8	0.00	2004.03	0.00	0.00	1599.86	0.00	2137.99	0.00	0.00	1716.34
23.0	18.8	14	0.70	0.70	0.00	0.00	23.50	0.00	143.5	0.00	2004.03	0.00	0.00	1599.09	0.00	2137.99	0.00	0.00	1715.57
23.1	18.9	14	0.70	0.70	0.00	0.00	23.63	0.00	144.3	0.00	2004.03	0.00	0.00	1598.33	0.00	2137.99	0.00	0.00	1714.81
23.2	19.0	14	0.70	0.70	0.00	0.00	23.75	0.00	145.1	0.00	2004.03	0.00	0.00	1597.57	0.00	2137.99	0.00	0.00	1714.05

23.3	19.1	14	0.70	0.70	0.00	0.00	23.88	0.00	145.8	0.00	2004.03	0.00	0.00	1596.80	0.00	2137.99	0.00	0.00	1713.28
23.4	19.2	14	0.70	0.70	0.00	0.00	24.00	0.00	146.6	0.00	2004.03	0.00	0.00	1596.04	0.00	2137.99	0.00	0.00	1712.52
23.5	19.3	14	0.70	0.70	0.00	0.00	24.13	0.00	147.4	0.00	2004.03	0.00	0.00	1595.28	0.00	2137.99	0.00	0.00	1711.76
23.6	19.4	14	0.70	0.70	0.00	0.00	24.25	0.00	148.1	0.00	2004.03	0.00	0.00	1594.51	0.00	2137.99	0.00	0.00	1710.99
23.7	19.5	14	0.70	0.70	0.00	0.00	24.38	0.00	148.9	0.00	2004.03	0.00	0.00	1593.75	0.00	2137.99	0.00	0.00	1710.23
23.8	19.6	14	0.70	0.70	0.00	0.00	24.50	0.00	149.7	0.00	2004.03	0.00	0.00	1592.99	0.00	2137.99	0.00	0.00	1709.47
23.9	19.7	14	0.70	0.70	0.00	0.00	24.63	0.00	150.4	0.00	2004.03	0.00	0.00	1592.22	0.00	2137.99	0.00	0.00	1708.70
24.0	19.8	14	0.70	0.70	0.00	0.00	24.75	0.00	151.2	0.00	2004.03	0.00	0.00	1591.46	0.00	2137.99	0.00	0.00	1707.94
24.1	19.9	14	0.70	0.70	0.00	0.00	24.88	0.00	151.9	0.00	2004.03	0.00	0.00	1590.70	0.00	2137.99	0.00	0.00	1707.18
24.2	20.0	14	0.70	0.70	0.00	0.00	25.00	0.00	152.7	0.00	2004.03	0.00	0.00	1589.93	0.00	2137.99	0.00	0.00	1706.41
24.3	20.1	14	0.70	0.70	0.00	0.00	25.13	0.00	153.5	0.00	2004.03	0.00	0.00	1589.17	0.00	2137.99	0.00	0.00	1705.65
24.4	20.2	14	0.70	0.70	0.00	0.00	25.25	0.00	154.2	0.00	2004.03	0.00	0.00	1588.41	0.00	2137.99	0.00	0.00	1704.89
24.5	20.3	14	0.70	0.70	0.00	0.00	25.38	0.00	155.0	0.00	2004.03	0.00	0.00	1587.64	0.00	2137.99	0.00	0.00	1704.12
24.6	20.4	14	0.70	0.70	0.00	0.00	25.50	0.00	155.8	0.00	2004.03	0.00	0.00	1586.88	0.00	2137.99	0.00	0.00	1703.36
24.7	20.5	14	0.70	0.70	0.00	0.00	25.63	0.00	156.5	0.00	2004.03	0.00	0.00	1586.11	0.00	2137.99	0.00	0.00	1702.59
24.8	20.6	14	0.70	0.70	0.00	0.00	25.75	0.00	157.3	0.00	2004.03	0.00	0.00	1585.35	0.00	2137.99	0.00	0.00	1701.83
24.9	20.7	14	0.70	0.70	0.00	0.00	25.88	0.00	158.1	0.00	2004.03	0.00	0.00	1584.59	0.00	2137.99	0.00	0.00	1701.07
25.0	20.8	14	0.70	0.70	0.00	0.00	26.00	0.00	158.8	0.00	2004.03	0.00	0.00	1583.82	0.00	2137.99	0.00	0.00	1700.30
25.1	20.9	14	0.70	0.70	0.00	0.00	26.13	0.00	159.6	0.00	2004.03	0.00	0.00	1655.97	0.00	2137.99	0.00	0.00	1753.20
25.2	21.0	14	0.70	0.70	0.00	0.00	26.25	0.00	160.3	0.00	2004.03	0.00	0.00	1728.18	0.00	2137.99	0.00	0.00	1806.23
25.3	21.1	14	0.70	0.70	0.00	0.00	26.38	0.00	161.1	0.00	2004.03	0.00	0.00	1800.45	0.00	2137.99	0.00	0.00	1859.41
25.4	21.2	14	0.70	0.70	0.00	0.00	26.50	0.00	161.9	0.00	2004.03	0.00	0.00	1872.78	0.00	2137.99	0.00	0.00	1912.73
25.5	21.3	14	0.70	0.70	0.00	0.00	26.63	0.00	162.6	0.00	2004.03	0.00	0.00	1945.18	0.00	2137.99	0.00	0.00	1966.20
25.6	21.4	14	0.70	0.70	0.00	0.00	26.75	0.00	163.4	0.00	2004.03	0.00	0.00	2017.65	0.00	2137.99	0.00	0.00	2019.80
25.7	21.5	14	0.70	0.70	0.00	0.00	26.88	0.00	164.2	0.00	2004.03	0.00	0.00	2090.18	0.00	2137.99	0.00	0.00	2073.55
25.8	21.6	14	0.70	0.70	0.00	0.00	27.00	0.00	164.9	0.00	2004.03	0.00	0.00	2162.77	0.00	2137.99	0.00	0.00	2127.44
25.9	21.7	14	0.70	0.70	0.00	0.00	27.13	0.00	165.7	0.00	2004.03	0.00	0.00	2235.43	0.00	2137.99	0.00	0.00	2181.48
26.0	21.8	14	0.70	0.70	0.00	0.00	27.25	0.00	166.5	0.00	2004.03	0.00	0.00	2308.16	0.00	2137.99	0.00	0.00	2235.65
26.1	21.9	15	0.35	0.70	0.40	22.00	27.38	5.56	167.2	61.25	2019.43	2074.12	1042.57	2394.33	77.63	2157.50	1526.45	767.28	2306.94
26.2	22.0	15	0.35	0.70	0.40	22.00	27.50	5.56	168.0	61.25	2034.82	2075.95	1043.49	2407.66	77.87	2177.07	1530.53	769.33	2324.76
26.3	22.1	15	0.35	0.70	0.40	22.00	27.63	5.56	168.7	61.25	2050.22	2077.79	1044.41	2420.99	78.11	2196.70	1534.59	771.37	2342.63
26.4	22.2	15	0.35	0.70	0.40	22.00	27.75	5.55	169.5	61.25	2065.61	2079.62	1045.33	2434.32	78.35	2216.39	1538.66	773.41	2360.55
26.5	22.3	15	0.35	0.70	0.40	22.00	27.88	5.55	170.3	61.25	2081.00	2081.45	1046.25	2447.65	78.59	2236.14	1542.72	775.46	2378.53
26.6	22.4	15	0.35	0.70	0.40	22.00	28.00	5.55	171.0	61.25	2096.40	2083.28	1047.17	2460.98	78.83	2255.95	1546.78	777.50	2396.55
26.7	22.5	15	0.35	0.70	0.40	22.00	28.13	5.55	171.8	61.25	2111.79	2085.12	1048.09	2474.32	79.07	2275.82	1550.83	779.53	2414.63
26.8	22.6	15	0.35	0.70	0.40	22.00	28.25	5.54	172.6	61.25	2127.19	2086.95	1049.02	2487.65	79.31	2295.76	1554.88	781.57	2432.76
26.9	22.7	15	0.35	0.70	0.40	22.00	28.38	5.54	173.3	61.25	2142.58	2088.78	1049.94	2500.98	79.55	2315.75	1558.93	783.60	2450.94
27.0	22.8	15	0.35	0.70	0.40	22.00	28.50	5.54	174.1	61.25	2157.97	2090.62	1050.86	2514.31	79.79	2335.81	1562.97	785.63	2469.17
27.1	22.9	15	0.35	0.70	0.40	22.00	28.63	5.54	174.8	61.25	2173.37	2092.45	1051.78	2527.64	80.03	2355.92	1567.01	787.66	2487.45
27.2	23.0	15	0.35	0.70	0.40	22.00	28.75	5.53	175.6	61.25	2188.76	2094.28	1052.70	2540.97	80.28	2376.10	1571.04	789.69	2505.78
27.3	23.1	15	0.35	0.70	0.40	22.00	28.88	5.53	176.4	61.25	2204.15	2096.12	1053.62	2554.30	80.52	2396.33	1575.07	791.72	2524.17
27.4	23.2	15	0.35	0.70	0.40	22.00	29.00	5.53	177.1	61.25	2219.55	2097.95	1054.54	2567.63	80.76	2416.63	1579.10	793.74	2542.60
27.5	23.3	15	0.35	0.70	0.40	22.00	29.13	5.53	177.9	61.25	2234.94	2099.78	1055.47	2580.96	81.00	2436.99	1583.12	795.76	2561.09
27.6	23.4	15	0.35	0.70	0.40	22.00	29.25	5.53	178.7	61.25	2250.34	2101.61	1056.39	2594.30	81.24	2457.40	1587.14	797.78	2579.63
27.7	23.5	15	0.35	0.70	0.40	22.00	29.38	5.52	179.4	61.25	2265.73	2103.45	1057.31	2607.63	81.48	2477.88	1591.15	799.80	2598.21
27.8	23.6	15	0.35	0.70	0.40	22.00	29.50	5.52	180.2	61.25	2281.12	2105.28	1058.23	2620.96	81.72	2498.42	1595.17	801.82	2616.85
27.9	23.7	15	0.35	0.70	0.40	22.00	29.63	5.52	181.0	61.25	2296.52	2107.11	1059.15	2634.29	81.96	2519.02	1599.17	803.83	2635.55

28.0	23.8	15	0.35	0.70	0.40	22.00	29.75	5.52	181.7	61.25	2311.91	2108.95	1060.07	2647.62	82.20	2539.68	1603.18	805.84	2654.29
28.1	23.9	15	0.35	0.70	0.40	22.00	29.88	5.51	182.5	61.25	2327.30	2110.78	1060.99	2660.95	82.44	2560.40	1607.18	807.86	2673.08
28.2	24.0	15	0.35	0.70	0.40	22.00	30.00	5.51	183.2	61.25	2342.70	2112.61	1061.91	2674.28	82.69	2581.18	1611.17	809.86	2691.93
28.3	24.1	15	0.35	0.70	0.40	22.00	30.13	5.51	184.0	61.25	2358.09	2114.45	1062.84	2687.61	82.93	2602.02	1615.17	811.87	2710.82
28.4	24.2	15	0.35	0.70	0.40	22.00	30.25	5.51	184.8	61.25	2373.49	2116.28	1063.76	2700.94	83.17	2622.93	1619.15	813.88	2729.77
28.5	24.3	15	0.35	0.70	0.40	22.00	30.38	5.50	185.5	61.25	2388.88	2118.11	1064.68	2714.28	83.41	2643.89	1623.14	815.88	2748.77
28.6	24.4	15	0.35	0.70	0.40	22.00	30.50	5.50	186.3	61.25	2404.27	2119.94	1065.60	2727.61	83.65	2664.91	1627.12	817.88	2767.82
28.7	24.5	15	0.35	0.70	0.40	22.00	30.63	5.50	187.1	61.25	2419.67	2121.78	1066.52	2740.94	83.89	2686.00	1631.10	819.88	2786.92
28.8	24.6	15	0.35	0.70	0.40	22.00	30.75	5.50	187.8	61.25	2435.06	2123.61	1067.44	2754.27	84.13	2707.14	1635.07	821.88	2806.07
28.9	24.7	15	0.35	0.70	0.40	22.00	30.88	5.49	188.6	61.25	2450.46	2125.44	1068.36	2767.60	84.37	2728.34	1639.04	823.87	2825.30
29.0	24.8	15	0.35	0.70	0.40	22.00	31.00	5.49	189.4	61.25	2465.85	2127.28	1069.29	2780.93	84.61	2749.61	1643.01	825.87	2844.61
29.1	24.9	15	0.35	0.70	0.40	22.00	31.13	5.49	190.1	61.25	2481.24	2129.11	1070.21	2794.26	84.85	2770.94	1646.97	827.86	2863.99
29.2	25.0	15	0.35	0.70	0.40	22.00	31.25	5.49	190.9	61.25	2496.64	2130.94	1071.13	2807.59	85.09	2792.32	1650.93	829.85	2883.45
29.3	25.1	15	0.35	0.70	0.40	22.00	31.38	5.48	191.6	61.25	2512.03	2132.78	1072.05	2820.92	85.34	2813.77	1654.88	831.84	2902.99
29.4	25.2	15	0.35	0.70	0.40	22.00	31.50	5.48	192.4	61.25	2527.42	2134.61	1072.97	2834.26	85.58	2835.28	1658.83	833.82	2922.60
29.5	25.3	15	0.35	0.70	0.40	22.00	31.63	5.48	193.2	61.25	2542.82	2136.44	1073.89	2847.59	85.82	2856.85	1662.78	835.81	2942.30
29.6	25.4	15	0.35	0.70	0.40	22.00	31.75	5.48	193.9	61.25	2558.21	2138.27	1074.81	2860.92	86.06	2878.48	1666.73	837.79	2962.07
29.7	25.5	15	0.35	0.70	0.40	22.00	31.88	5.48	194.7	61.25	2573.61	2140.11	1075.74	2874.25	86.30	2900.17	1670.67	839.77	2981.92
29.8	25.6	15	0.35	0.70	0.40	22.00	32.00	5.47	195.5	61.25	2589.00	2141.94	1076.66	2887.58	86.54	2921.92	1674.60	841.75	3001.84
29.9	25.7	15	0.35	0.70	0.40	22.00	32.13	5.47	196.2	61.25	2604.39	2143.77	1077.58	2900.91	86.78	2943.73	1679.26	844.09	3021.85
30.0	25.8	15	0.35	0.70	0.40	22.00	32.25	5.47	197.0	61.25	2619.79	2145.61	1078.50	2914.24	87.02	2965.60	1683.93	846.43	3041.91
30.1	25.9	15	0.35	0.70	0.40	22.00	32.38	5.47	197.8	61.25	2635.18	2147.44	1079.42	2927.57	87.26	2987.53	1688.59	848.78	3062.02
30.2	26.0	15	0.35	0.70	0.40	22.00	32.50	5.47	198.5	61.25	2650.57	2149.27	1080.34	2940.91	87.50	3009.52	1693.25	851.12	3082.18
30.3	26.1	15	0.35	0.70	0.40	22.00	32.63	5.47	199.3	61.25	2665.97	2151.11	1081.26	2954.24	87.75	3031.57	1697.91	853.46	3102.40
30.4	26.2	15	0.35	0.70	0.40	22.00	32.75	5.47	200.0	61.25	2681.36	2152.94	1082.18	2967.57	87.99	3053.69	1702.58	855.81	3122.66
30.5	26.3	15	0.35	0.70	0.40	22.00	32.88	5.47	200.8	61.25	2696.76	2154.77	1083.11	2980.90	88.23	3075.86	1707.24	858.15	3142.98
30.6	26.4	15	0.35	0.70	0.40	22.00	33.00	5.47	201.6	61.25	2712.15	2156.60	1084.03	2994.23	88.47	3098.10	1711.90	860.50	3163.36
30.7	26.5	15	0.35	0.70	0.40	22.00	33.13	5.47	202.3	61.25	2727.54	2158.44	1084.95	3007.56	88.71	3120.39	1716.57	862.84	3183.78
30.8	26.6	15	0.35	0.70	0.40	22.00	33.25	5.47	203.1	61.25	2742.94	2160.27	1085.87	3020.89	88.95	3142.75	1721.23	865.18	3204.26
30.9	26.7	15	0.35	0.70	0.40	22.00	33.38	5.47	203.9	61.25	2758.33	2162.10	1086.79	3034.22	89.19	3165.16	1725.89	867.53	3224.80
31.0	26.8	15	0.35	0.70	0.40	22.00	33.50	5.47	204.6	61.25	2773.73	2163.94	1087.71	3047.55	89.43	3187.64	1730.55	869.87	3245.38
31.1	26.9	15	0.35	0.70	0.40	22.00	33.63	5.47	205.4	61.25	2789.12	2165.77	1088.63	3060.89	89.67	3210.18	1735.22	872.21	3266.02
31.2	27.0	15	0.35	0.70	0.40	22.00	33.75	5.47	206.2	61.25	2804.51	2167.60	1089.56	3074.22	89.91	3232.77	1739.88	874.56	3286.71
31.3	27.1	15	0.35	0.70	0.40	22.00	33.88	5.47	206.9	61.25	2819.91	2169.44	1090.48	3087.55	90.16	3255.43	1744.54	876.90	3307.45
31.4	27.2	15	0.35	0.70	0.40	22.00	34.00	5.47	207.7	61.25	2835.30	2171.27	1091.40	3100.88	90.40	3278.15	1749.20	879.25	3328.24
31.5	27.3	15	0.35	0.70	0.40	22.00	34.13	5.47	208.4	61.25	2850.69	2173.10	1092.32	3114.21	90.64	3300.93	1753.87	881.59	3349.09
31.6	27.4	15	0.35	0.70	0.40	22.00	34.25	5.47	209.2	61.25	2866.09	2174.93	1093.24	3127.54	90.88	3323.77	1758.53	883.93	3369.99
31.7	27.5	15	0.35	0.70	0.40	22.00	34.38	5.47	210.0	61.25	2881.48	2176.77	1094.16	3140.87	91.12	3346.67	1763.19	886.28	3390.94
31.8	27.6	15	0.35	0.70	0.40	22.00	34.50	5.47	210.7	61.25	2896.88	2178.60	1095.08	3154.20	91.36	3369.63	1767.86	888.62	3411.95
31.9	27.7	15	0.35	0.70	0.40	22.00	34.63	5.47	211.5	61.25	2912.27	2180.43	1096.01	3167.53	91.60	3392.66	1772.52	890.96	3433.01
32.0	27.8	15	0.35	0.70	0.40	22.00	34.75	5.47	212.3	61.25	2927.66	2182.27	1096.93	3180.87	91.84	3415.74	1777.18	893.31	3454.12
32.1	27.9	15	0.35	0.70	0.40	22.00	34.88	5.47	213.0	61.25	2943.06	2184.10	1097.85	3194.20	92.08	3438.88	1781.84	895.65	3475.28
32.2	28.0	15	0.35	0.70	0.40	22.00	35.00	5.47	213.8	61.25	2958.45	2185.93	1098.77	3207.53	92.32	3462.08	1786.51	898.00	3496.50
32.3	28.1	15	0.35	0.70	0.40	22.00	35.13	5.47	214.6	61.25	2973.84	2187.77	1099.69	3220.86	92.56	3485.35	1791.17	900.34	3517.77
32.4	28.2	15	0.35	0.70	0.40	22.00	35.25	5.47	215.3	61.25	2989.24	2189.60	1100.61	3234.19	92.81	3508.67	1795.83	902.68	3539.09
32.5	28.3	15	0.35	0.70	0.40	22.00	35.38	5.47	216.1	61.25	3004.63	2191.43	1101.53	3247.52	93.05	3532.06	1800.49	905.03	3560.46
32.6	28.4	15	0.35	0.70	0.40	22.00	35.50	5.47	216.8	61.25	3020.03	2193.26	1102.45	3260.85	93.29	3555.50	1805.16	907.37	3581.89

32.7	28.5	15	0.35	0.70	0.40	22.00	35.63	5.47	217.6	61.25	3035.42	2195.10	1103.38	3274.18	93.53	3579.01	1809.82	909.71	3603.37
32.8	28.6	15	0.35	0.70	0.40	22.00	35.75	5.47	218.4	61.25	3050.81	2196.93	1104.30	3287.51	93.77	3602.58	1814.48	912.06	3624.90
32.9	28.7	15	0.35	0.70	0.40	22.00	35.88	5.47	219.1	61.25	3066.21	2198.76	1105.22	3300.85	94.01	3626.20	1819.15	914.40	3646.49
33.0	28.8	15	0.35	0.70	0.40	22.00	36.00	5.47	219.9	61.25	3081.60	2200.60	1106.14	3314.18	94.25	3649.89	1823.81	916.75	3668.13
33.1	28.9	15	0.35	0.70	0.40	22.00	36.13	5.47	220.7	61.25	3097.00	2202.43	1107.06	3327.51	94.49	3673.64	1828.47	919.09	3689.82
33.2	29.0	15	0.35	0.70	0.40	22.00	36.25	5.47	221.4	61.25	3112.39	2204.26	1107.98	3340.84	94.73	3697.45	1833.13	921.43	3711.56
33.3	29.1	15	0.35	0.70	0.40	22.00	36.38	5.47	222.2	61.25	3127.78	2206.10	1108.90	3354.17	94.97	3721.32	1837.80	923.78	3733.35
33.4	29.2	15	0.35	0.70	0.40	22.00	36.50	5.47	223.0	61.25	3143.18	2207.93	1109.83	3367.50	95.22	3745.25	1842.46	926.12	3755.20
33.5	29.3	15	0.35	0.70	0.40	22.00	36.63	5.47	223.7	61.25	3158.57	2209.76	1110.75	3380.83	95.46	3769.24	1847.12	928.46	3777.10
33.6	29.4	15	0.35	0.70	0.40	22.00	36.75	5.47	224.5	61.25	3173.96	2211.59	1111.67	3394.16	95.70	3793.29	1851.78	930.81	3799.06
33.7	29.5	15	0.35	0.70	0.40	22.00	36.88	5.47	225.2	61.25	3189.36	2213.43	1112.59	3407.49	95.94	3817.40	1856.45	933.15	3821.06
33.8	29.6	15	0.35	0.70	0.40	22.00	37.00	5.47	226.0	61.25	3204.75	2215.26	1113.51	3420.83	96.18	3841.58	1861.11	935.50	3843.12
33.9	29.7	15	0.35	0.70	0.40	22.00	37.13	5.47	226.8	61.25	3220.15	2217.09	1114.43	3434.16	96.42	3865.81	1865.77	937.84	3865.23
34.0	29.8	15	0.35	0.70	0.40	22.00	37.25	5.47	227.5	61.25	3235.54	2218.93	1115.35	3447.49	96.66	3890.10	1870.43	940.18	3887.40
34.1	29.9	15	0.35	0.70	0.40	22.00	37.38	5.47	228.3	61.25	3250.93	2220.76	1116.28	3460.82	96.90	3914.46	1875.10	942.53	3909.61
34.2	30.0	15	0.35	0.70	0.40	22.00	37.50	5.47	229.1	61.25	3266.33	2222.59	1117.20	3474.15	97.14	3938.87	1879.76	944.87	3931.88
34.3	30.1	15	0.35	0.70	0.40	22.00	37.63	5.47	229.8	61.25	3281.72	2224.43	1118.12	3487.48	97.38	3963.35	1884.42	947.21	3954.21
34.4	30.2	15	0.35	0.70	0.40	22.00	37.75	5.47	230.6	61.25	3297.11	2226.26	1119.04	3500.81	97.62	3987.88	1889.09	949.56	3976.58
34.5	30.3	15	0.35	0.70	0.40	22.00	37.88	5.47	231.4	61.25	3312.51	2228.09	1119.96	3514.14	97.87	4012.48	1893.75	951.90	3999.01
34.6	30.4	15	0.35	0.70	0.40	22.00	38.00	5.47	232.1	61.25	3327.90	2229.92	1120.88	3527.47	98.11	4037.14	1898.41	954.25	4021.49
34.7	30.5	15	0.35	0.70	0.40	22.00	38.13	5.47	232.9	61.25	3343.30	2231.76	1121.80	3540.81	98.35	4061.85	1903.07	956.59	4044.02
34.8	30.6	15	0.35	0.70	0.40	22.00	38.25	5.47	233.6	61.25	3358.69	2233.59	1122.72	3554.14	98.59	4086.63	1907.74	958.93	4066.61
34.9	30.7	15	0.35	0.70	0.40	22.00	38.38	5.47	234.4	61.25	3374.08	2235.42	1123.65	3567.47	98.83	4111.47	1912.40	961.28	4089.25
35.0	30.8	15	0.35	0.70	0.40	22.00	38.50	5.47	235.2	61.25	3389.48	2237.26	1124.57	3580.80	99.07	4136.37	1917.06	963.62	4111.94
35.1	30.9	15	0.35	0.70	0.40	22.00	38.63	5.47	235.9	61.25	3404.87	2239.09	1125.49	3594.13	99.31	4161.33	1921.72	965.96	4134.68
35.2	31.0	15	0.35	0.70	0.40	22.00	38.75	5.47	236.7	61.25	3420.26	2240.92	1126.41	3607.46	99.55	4186.35	1926.39	968.31	4157.48
35.3	31.1	15	0.35	0.70	0.40	22.00	38.88	5.47	237.5	61.25	3435.66	2242.76	1127.33	3620.79	99.79	4211.43	1931.05	970.65	4180.32
35.4	31.2	15	0.35	0.70	0.40	22.00	39.00	5.47	238.2	61.25	3451.05	2244.59	1128.25	3634.12	100.03	4236.57	1935.71	973.00	4203.23
35.5	31.3	15	0.35	0.70	0.40	22.00	39.13	5.47	239.0	61.25	3466.45	2246.42	1129.17	3647.45	100.28	4261.77	1940.38	975.34	4226.18
35.6	31.4	15	0.35	0.70	0.40	22.00	39.25	5.47	239.7	61.25	3481.84	2248.25	1130.10	3660.79	100.52	4287.04	1945.04	977.68	4249.19
35.7	31.5	15	0.35	0.70	0.40	22.00	39.38	5.47	240.5	61.25	3497.23	2250.09	1131.02	3674.12	100.76	4312.36	1949.70	980.03	4272.25
35.8	31.6	15	0.35	0.70	0.40	22.00	39.50	5.47	241.3	61.25	3512.63	2251.92	1131.94	3687.45	101.00	4337.74	1954.36	982.37	4295.36
35.9	31.7	15	0.35	0.70	0.40	22.00	39.63	5.47	242.0	61.25	3528.02	2253.75	1132.86	3700.78	101.24	4363.19	1959.03	984.71	4318.52
36.0	31.8	15	0.35	0.70	0.40	22.00	39.75	5.47	242.8	61.25	3543.42	2255.59	1133.78	3714.11	101.48	4388.69	1963.69	987.06	4341.74
36.1	31.9	15	0.35	0.70	0.40	22.00	39.88	5.47	243.6	61.25	3558.81	2257.42	1134.70	3727.44	101.72	4414.26	1968.35	989.40	4365.01
36.2	32.0	15	0.35	0.70	0.40	22.00	40.00	5.47	244.3	61.25	3574.20	2259.25	1135.62	3740.77	101.96	4439.88	1973.01	991.75	4388.33
36.3	32.1	15	0.35	0.70	0.40	22.00	40.13	5.47	245.1	61.25	3589.60	2261.08	1136.55	3754.10	102.20	4465.57	1977.68	994.09	4411.71
36.4	32.2	15	0.35	0.70	0.40	22.00	40.25	5.47	245.9	61.25	3604.99	2262.92	1137.47	3767.43	102.44	4491.32	1982.34	996.43	4435.14
36.5	32.3	15	0.35	0.70	0.40	22.00	40.38	5.47	246.6	61.25	3620.38	2264.75	1138.39	3780.77	102.69	4517.12	1987.00	998.78	4458.62
36.6	32.4	15	0.35	0.70	0.40	22.00	40.50	5.47	247.4	61.25	3635.78	2266.58	1139.31	3794.10	102.93	4542.99	1991.67	1001.12	4482.15
36.7	32.5	15	0.35	0.70	0.40	22.00	40.63	5.47	248.1	61.25	3651.17	2268.42	1140.23	3807.43	103.17	4568.92	1996.33	1003.46	4505.74
36.8	32.6	15	0.35	0.70	0.40	22.00	40.75	5.47	248.9	61.25	3666.57	2270.25	1141.15	3820.76	103.41	4594.91	2000.99	1005.81	4529.38
36.9	32.7	15	0.35	0.70	0.40	22.00	40.88	5.47	249.7	61.25	3681.96	2272.08	1142.07	3834.09	103.65	4620.96	2005.65	1008.15	4553.07
37.0	32.8	15	0.35	0.70	0.40	22.00	41.00	5.47	250.4	61.25	3697.35	2273.92	1142.99	3847.42	103.89	4647.07	2010.32	1010.50	4576.81
37.1	32.9	15	0.35	0.70	0.40	22.00	41.13	5.47	251.2	61.25	3712.75	2275.75	1143.92	3860.75	104.13	4673.24	2014.98	1012.84	4600.61
37.2	33.0	15	0.35	0.70	0.40	22.00	41.25	5.47	252.0	61.25	3728.14	2277.58	1144.84	3874.08	104.37	4699.47	2019.64	1015.18	4624.46
37.3	33.1	15	0.35	0.70	0.40	22.00	41.38	5.47	252.7	61.25	3743.53	2279.41	1145.76	3887.42	104.61	4725.77	2024.30	1017.53	4648.36

37.4	33.2	15	0.35	0.70	0.40	22.00	41.50	5.47	253.5	61.25	3758.93	2281.25	1146.68	3900.75	104.85	4752.12	2028.97	1019.87	4672.31
37.5	33.3	15	0.35	0.70	0.40	22.00	41.63	5.47	254.3	61.25	3774.32	2283.08	1147.60	3914.08	105.09	4778.53	2033.63	1022.21	4696.32
37.6	33.4	15	0.35	0.70	0.40	22.00	41.75	5.47	255.0	61.25	3789.72	2284.91	1148.52	3927.41	105.34	4805.01	2038.29	1024.56	4720.38
37.7	33.5	15	0.35	0.70	0.40	22.00	41.88	5.47	255.8	61.25	3805.11	2286.75	1149.44	3940.74	105.58	4831.54	2042.95	1026.90	4744.49
37.8	33.6	15	0.35	0.70	0.40	22.00	42.00	5.47	256.5	61.25	3820.50	2288.58	1150.37	3954.07	105.82	4858.13	2047.62	1029.24	4768.66
37.9	33.7	15	0.35	0.70	0.40	22.00	42.13	5.47	257.3	61.25	3835.90	2290.41	1151.29	3967.40	106.06	4884.79	2052.28	1031.59	4792.88
38.0	33.8	15	0.35	0.70	0.40	22.00	42.25	5.47	258.1	61.25	3851.29	2292.25	1152.21	3980.73	106.30	4911.51	2056.94	1033.93	4817.15
38.1	33.9	15	0.35	0.70	0.40	22.00	42.38	5.47	258.8	61.25	3866.69	2294.08	1153.13	3994.06	106.54	4938.28	2061.61	1036.28	4841.47
38.2	34.0	15	0.35	0.70	0.40	22.00	42.50	5.47	259.6	61.25	3882.08	2295.91	1154.05	4007.40	106.78	4965.12	2066.27	1038.62	4865.85
38.3	34.1	15	0.35	0.70	0.40	22.00	42.63	5.47	260.4	61.25	3897.47	2297.74	1154.97	4020.73	107.02	4992.02	2070.93	1040.96	4890.28
38.4	34.2	15	0.35	0.70	0.40	22.00	42.75	5.47	261.1	61.25	3912.87	2299.58	1155.89	4034.06	107.26	5018.98	2075.59	1043.31	4914.76
38.5	34.3	15	0.35	0.70	0.40	22.00	42.88	5.47	261.9	61.25	3928.26	2301.41	1156.82	4047.39	107.50	5045.99	2080.26	1045.65	4939.29
38.6	34.4	15	0.35	0.70	0.40	22.00	43.00	5.47	262.7	61.25	3943.65	2303.24	1157.74	4060.72	107.75	5073.07	2084.92	1047.99	4963.88
38.7	34.5	15	0.35	0.70	0.40	22.00	43.13	5.47	263.4	61.25	3959.05	2305.08	1158.66	4074.05	107.99	5100.21	2089.58	1050.34	4988.52
38.8	34.6	15	0.35	0.70	0.40	22.00	43.25	5.47	264.2	61.25	3974.44	2306.91	1159.58	4087.38	108.23	5127.41	2094.24	1052.68	5013.21
38.9	34.7	15	0.35	0.70	0.40	22.00	43.38	5.47	264.9	61.25	3989.84	2308.74	1160.50	4100.71	108.47	5154.68	2098.91	1055.03	5037.95
39.0	34.8	15	0.35	0.70	0.40	22.00	43.50	5.47	265.7	61.25	4005.23	2310.58	1161.42	4114.04	108.71	5182.00	2103.57	1057.37	5062.75
39.1	34.9	15	0.35	0.70	0.40	22.00	43.63	5.47	266.5	61.25	4020.62	2312.41	1162.34	4127.38	108.95	5209.38	2108.23	1059.71	5087.60
39.2	35.0	15	0.35	0.70	0.40	22.00	43.75	5.47	267.2	61.25	4036.02	2314.24	1163.26	4140.71	109.19	5236.82	2112.90	1062.06	5112.50
39.3	35.1	15	0.35	0.70	0.40	22.00	43.88	5.47	268.0	61.25	4051.41	2316.07	1164.19	4154.04	109.43	5264.32	2117.56	1064.40	5137.46
39.4	35.2	15	0.35	0.70	0.40	22.00	44.00	5.47	268.8	61.25	4066.80	2317.91	1165.11	4167.37	109.67	5291.89	2122.22	1066.74	5162.47
39.5	35.3	15	0.35	0.70	0.40	22.00	44.13	5.47	269.5	61.25	4082.20	2319.74	1166.03	4180.70	109.91	5319.51	2126.88	1069.09	5187.53
39.6	35.4	15	0.35	0.70	0.40	22.00	44.25	5.47	270.3	61.25	4097.59	2321.57	1166.95	4194.03	110.15	5347.20	2131.55	1071.43	5212.64
39.7	35.5	15	0.35	0.70	0.40	22.00	44.38	5.47	271.1	61.25	4112.99	2323.41	1167.87	4207.36	110.40	5374.94	2136.21	1073.78	5237.81
39.8	35.6	15	0.35	0.70	0.40	22.00	44.50	5.47	271.8	61.25	4128.38	2325.24	1168.79	4220.69	110.64	5402.75	2140.87	1076.12	5263.02
39.9	35.7	15	0.35	0.70	0.40	22.00	44.63	5.47	272.6	61.25	4143.77	2327.07	1169.71	4234.02	110.88	5430.62	2145.53	1078.46	5288.30
40.0	35.8	15	0.35	0.70	0.40	22.00	44.75	5.47	273.3	61.25	4159.17	2328.91	1170.64	4247.36	111.12	5458.54	2150.20	1080.81	5313.62
40.1	35.9	15	0.35	0.70	0.40	22.00	44.88	5.47	274.1	61.25	4174.56	2330.74	1171.56	4260.69	111.36	5486.53	2154.86	1083.15	5339.00
40.2	36.0	15	0.35	0.70	0.40	22.00	45.00	5.47	274.9	61.25	4189.96	2332.57	1172.48	4274.02	111.60	5514.58	2159.52	1085.49	5364.42
40.3	36.1	15	0.35	0.70	0.40	22.00	45.13	5.47	275.6	61.25	4205.35	2334.40	1173.40	4287.35	111.84	5542.69	2164.19	1087.84	5389.91
40.4	36.2	15	0.35	0.70	0.40	22.00	45.25	5.47	276.4	61.25	4220.74	2336.24	1174.32	4300.68	112.08	5570.86	2168.85	1090.18	5415.44
40.5	36.3	15	0.35	0.70	0.40	22.00	45.38	5.47	277.2	61.25	4236.14	2338.07	1175.24	4314.01	112.32	5599.09	2173.51	1092.53	5441.03
40.6	36.4	15	0.35	0.70	0.40	22.00	45.50	5.47	277.9	61.25	4251.53	2339.90	1176.16	4327.34	112.56	5627.38	2178.17	1094.87	5466.67
40.7	36.5	15	0.35	0.70	0.40	22.00	45.63	5.47	278.7	61.25	4266.92	2341.74	1177.09	4340.67	112.81	5655.73	2182.84	1097.21	5492.36
40.8	36.6	15	0.35	0.70	0.40	22.00	45.75	5.47	279.5	61.25	4282.32	2343.57	1178.01	4354.00	113.05	5684.14	2187.50	1099.56	5518.11
40.9	36.7	15	0.35	0.70	0.40	22.00	45.88	5.47	280.2	61.25	4297.71	2345.40	1178.93	4367.34	113.29	5712.61	2192.16	1101.90	5543.90
41.0	36.8	15	0.35	0.70	0.40	22.00	46.00	5.47	281.0	61.25	4313.11	2347.24	1179.85	4380.67	113.53	5741.15	2196.82	1104.24	5569.75
41.1	36.9	15	0.35	0.70	0.40	22.00	46.13	5.47	281.7	61.25	4328.50	2349.07	1180.77	4394.00	113.77	5769.74	2201.49	1106.59	5595.66
41.2	37.0	15	0.35	0.70	0.40	22.00	46.25	5.47	282.5	61.25	4343.89	2350.90	1181.69	4407.33	114.01	5798.39	2206.15	1108.93	5621.61
41.3	37.1	15	0.35	0.70	0.40	22.00	46.38	5.47	283.3	61.25	4359.29	2352.73	1182.61	4420.66	114.25	5827.11	2210.81	1111.28	5647.62
41.4	37.2	15	0.35	0.70	0.40	22.00	46.50	5.47	284.0	61.25	4374.68	2354.57	1183.53	4433.99	114.49	5855.88	2215.48	1113.62	5673.68
41.5	37.3	15	0.35	0.70	0.40	22.00	46.63	5.47	284.8	61.25	4390.07	2356.40	1184.46	4447.32	114.73	5884.72	2220.14	1115.96	5699.80
41.6	37.4	15	0.35	0.70	0.40	22.00	46.75	5.47	285.6	61.25	4405.47	2358.23	1185.38	4460.65	114.97	5913.61	2224.80	1118.31	5725.96
41.7	37.5	15	0.35	0.70	0.40	22.00	46.88	5.47	286.3	61.25	4420.86	2360.07	1186.30	4473.98	115.22	5942.57	2229.46	1120.65	5752.18
41.8	37.6	15	0.35	0.70	0.40	22.00	47.00	5.47	287.1	61.25	4436.26	2361.90	1187.22	4487.32	115.46	5971.59	2234.13	1122.99	5778.45
41.9	37.7	15	0.35	0.70	0.40	22.00	47.13	5.47	287.9	61.25	4451.65	2363.73	1188.14	4500.65	115.70	6000.67	2238.79	1125.34	5804.78
42.0	37.8	15	0.35	0.70	0.40	22.00	47.25	5.47	288.6	61.25	4467.04	2365.57	1189.06	4513.98	115.94	6029.80	2243.45	1127.68	5831.15

42.1	37.9	15	0.35	0.70	0.40	22.00	47.38	5.47	289.4	61.25	4482.44	2367.40	1189.98	4527.31	116.18	6059.00	2248.11	1130.03	5857.58
42.2	38.0	15	0.35	0.70	0.40	22.00	47.50	5.47	290.1	61.25	4497.83	2369.23	1190.91	4540.64	116.42	6088.26	2252.78	1132.37	5884.07
42.3	38.1	15	0.35	0.70	0.40	22.00	47.63	5.47	290.9	61.25	4513.23	2371.06	1191.83	4553.97	116.66	6117.58	2257.44	1134.71	5910.60
42.4	38.2	15	0.35	0.70	0.40	22.00	47.75	5.47	291.7	61.25	4528.62	2372.90	1192.75	4567.30	116.90	6146.96	2262.10	1137.06	5937.19
42.5	38.3	15	0.35	0.70	0.40	22.00	47.88	5.47	292.4	61.25	4544.01	2374.73	1193.67	4580.63	117.14	6176.41	2266.76	1139.40	5963.83
42.6	38.4	15	0.35	0.70	0.40	22.00	48.00	5.47	293.2	61.25	4559.41	2376.56	1194.59	4593.96	117.38	6205.91	2271.43	1141.74	5990.52
42.7	38.5	15	0.35	0.70	0.40	22.00	48.13	5.47	294.0	61.25	4574.80	2378.40	1195.51	4607.30	117.62	6235.47	2276.09	1144.09	6017.27
42.8	38.6	15	0.35	0.70	0.40	22.00	48.25	5.47	294.7	61.25	4590.19	2380.23	1196.43	4620.63	117.87	6265.09	2280.75	1146.43	6044.07
42.9	38.7	15	0.35	0.70	0.40	22.00	48.38	5.47	295.5	61.25	4605.59	2382.06	1197.36	4633.96	118.11	6294.78	2285.42	1148.78	6070.92
43.0	38.8	15	0.35	0.70	0.40	22.00	48.50	5.47	296.3	61.25	4620.98	2383.90	1198.28	4647.29	118.35	6324.52	2290.08	1151.12	6097.82
43.1	38.9	15	0.35	0.70	0.40	22.00	48.63	5.47	297.0	61.25	4636.38	2385.73	1199.20	4660.62	118.59	6354.32	2294.74	1153.46	6124.78
43.2	39.0	15	0.35	0.70	0.40	22.00	48.75	5.47	297.8	61.25	4651.77	2387.56	1200.12	4673.95	118.83	6384.19	2299.40	1155.81	6151.79
43.3	39.1	15	0.35	0.70	0.40	22.00	48.88	5.47	298.5	61.25	4667.16	2389.39	1201.04	4687.28	119.07	6414.11	2304.07	1158.15	6178.85
43.4	39.2	15	0.35	0.70	0.40	22.00	49.00	5.47	299.3	61.25	4682.56	2391.23	1201.96	4700.61	119.31	6444.10	2308.73	1160.49	6205.96
43.5	39.3	15	0.35	0.70	0.40	22.00	49.13	5.47	300.1	61.25	4697.95	2393.06	1202.88	4713.94	119.55	6474.15	2313.39	1162.84	6233.13
43.6	39.4	15	0.35	0.70	0.40	22.00	49.25	5.47	300.8	61.25	4713.34	2394.89	1203.81	4727.28	119.79	6504.26	2318.05	1165.18	6260.35
43.7	39.5	15	0.35	0.70	0.40	22.00	49.38	5.47	301.6	61.25	4728.74	2396.73	1204.73	4740.61	120.03	6534.42	2322.72	1167.53	6287.62
43.8	39.6	15	0.35	0.70	0.40	22.00	49.50	5.47	302.4	61.25	4744.13	2398.56	1205.65	4753.94	120.28	6564.65	2327.38	1169.87	6314.95
43.9	39.7	15	0.35	0.70	0.40	22.00	49.63	5.47	303.1	61.25	4759.53	2400.39	1206.57	4767.27	120.52	6594.94	2332.04	1172.21	6342.32
44.0	39.8	15	0.35	0.70	0.40	22.00	49.75	5.47	303.9	61.25	4774.92	2402.23	1207.49	4780.60	120.76	6625.29	2336.71	1174.56	6369.76
44.1	39.9	15	0.35	0.70	0.40	22.00	49.88	5.47	304.6	61.25	4790.31	2404.06	1208.41	4793.93	121.00	6655.70	2341.37	1176.90	6397.24
44.2	40.0	15	0.35	0.70	0.40	22.00	50.00	5.47	305.4	61.25	4805.71	2405.89	1209.33	4807.26	121.24	6686.17	2346.03	1179.24	6424.77
44.3	40.1	15	0.35	0.70	0.40	22.00	50.13	5.47	306.2	61.25	4821.10	2407.72	1210.25	4820.59	121.48	6716.70	2350.69	1181.59	6452.36
44.4	40.2	15	0.35	0.70	0.40	22.00	50.25	5.47	306.9	61.25	4836.49	2409.56	1211.18	4833.93	121.72	6747.29	2355.36	1183.93	6480.00
44.5	40.3	15	0.35	0.70	0.40	22.00	50.38	5.47	307.7	61.25	4851.89	2411.39	1212.10	4847.26	121.96	6777.95	2360.02	1186.27	6507.70
44.6	40.4	15	0.35	0.70	0.40	22.00	50.50	5.47	308.5	61.25	4867.28	2413.22	1213.02	4860.59	122.20	6808.66	2364.68	1188.62	6535.44
44.7	40.5	15	0.35	0.70	0.40	22.00	50.63	5.47	309.2	61.25	4882.68	2415.06	1213.94	4873.92	122.44	6839.43	2369.34	1190.96	6563.24
44.8	40.6	15	0.35	0.70	0.40	22.00	50.75	5.47	310.0	61.25	4898.07	2416.89	1214.86	4887.25	122.68	6870.27	2374.01	1193.31	6591.09
44.9	40.7	15	0.35	0.70	0.40	22.00	50.88	5.47	310.8	61.25	4913.46	2418.72	1215.78	4900.58	122.93	6901.16	2378.67	1195.65	6619.00
45.0	40.8	15	0.35	0.70	0.40	22.00	51.00	5.47	311.5	61.25	4928.86	2420.56	1216.70	4913.91	123.17	6932.12	2383.33	1197.99	6646.95
45.1	40.9	15	0.35	0.70	0.40	22.00	51.13	5.47	312.3	61.25	4944.25	2422.39	1217.63	4927.24	123.41	6963.13	2388.00	1200.34	6674.96
45.2	41.0	15	0.35	0.70	0.40	22.00	51.25	5.47	313.0	61.25	4959.65	2424.22	1218.55	4940.57	123.65	6994.21	2392.66	1202.68	6703.03
45.3	41.1	15	0.35	0.70	0.40	22.00	51.38	5.47	313.8	61.25	4975.04	2426.05	1219.47	4953.91	123.89	7025.35	2397.32	1205.02	6731.14
45.4	41.2	15	0.35	0.70	0.40	22.00	51.50	5.47	314.6	61.25	4990.43	2427.89	1220.39	4967.24	124.13	7056.54	2401.98	1207.37	6759.31
45.5	41.3	15	0.35	0.70	0.40	22.00	51.63	5.47	315.3	61.25	5005.83	2429.72	1221.31	4980.57	124.37	7087.80	2406.65	1209.71	6787.53
45.6	41.4	15	0.35	0.70	0.40	22.00	51.75	5.47	316.1	61.25	5021.22	2431.55	1222.23	4993.90	124.61	7119.12	2411.31	1212.06	6815.80
45.7	41.5	15	0.35	0.70	0.40	22.00	51.88	5.47	316.9	61.25	5036.61	2433.39	1223.15	5007.23	124.85	7150.50	2415.97	1214.40	6844.13
45.8	41.6	15	0.35	0.70	0.40	22.00	52.00	5.47	317.6	61.25	5052.01	2435.22	1224.08	5020.56	125.09	7181.94	2420.63	1216.74	6872.51
45.9	41.7	15	0.35	0.70	0.40	22.00	52.13	5.47	318.4	61.25	5067.40	2437.05	1225.00	5033.89	125.34	7213.44	2425.30	1219.09	6900.94
46.0	41.8	15	0.35	0.70	0.40	22.00	52.25	5.47	319.2	61.25	5082.80	2438.89	1225.92	5047.22	125.58	7245.00	2429.96	1221.43	6929.42
46.1	41.9	15	0.35	0.70	0.40	22.00	52.38	5.47	319.9	61.25	5098.19	2440.72	1226.84	5060.55	125.82	7276.62	2434.62	1223.77	6957.96
46.2	42.0	15	0.35	0.70	0.40	22.00	52.50	5.47	320.7	61.25	5113.58	2442.55	1227.76	5073.89	126.06	7308.30	2439.28	1226.12	6986.54
46.3	42.1	15	0.35	0.70	0.40	22.00	52.63	5.47	321.4	61.25	5128.98	2444.38	1228.68	5087.22	126.30	7340.05	2443.95	1228.46	7015.19
46.4	42.2	15	0.35	0.70	0.40	22.00	52.75	5.47	322.2	61.25	5144.37	2446.22	1229.60	5100.55	126.54	7371.85	2448.61	1230.81	7043.88
46.5	42.3	15	0.35	0.70	0.40	22.00	52.88	5.47	323.0	61.25	5159.76	2448.05	1230.52	5113.88	126.78	7403.71	2453.27	1233.15	7072.63
46.6	42.4	15	0.35	0.70	0.40	22.00	53.00	5.47	323.7	61.25	5175.16	2449.88	1231.45	5127.21	127.02	7435.64	2457.94	1235.49	7101.43
46.7	42.5	15	0.35	0.70	0.40	22.00	53.13	5.47	324.5	61.25	5190.55	2451.72	1232.37	5140.54	127.26	7467.62	2462.60	1237.84	7130.28

46.8	42.6	15	0.35	0.70	0.40	22.00	53.25	5.47	325.3	61.25	5205.95	2453.55	1233.29	5153.87	127.50	7499.67	2467.26	1240.18	7159.18
46.9	42.7	15	0.35	0.70	0.40	22.00	53.38	5.47	326.0	61.25	5221.34	2455.38	1234.21	5167.20	127.75	7531.77	2471.92	1242.52	7188.14
47.0	42.8	15	0.35	0.70	0.40	22.00	53.50	5.47	326.8	61.25	5236.73	2457.22	1235.13	5180.53	127.99	7563.94	2476.59	1244.87	7217.15
47.1	42.9	15	0.35	0.70	0.40	22.00	53.63	5.47	327.6	61.25	5252.13	2459.05	1236.05	5193.87	128.23	7596.17	2481.25	1247.21	7246.21
47.2	43.0	15	0.35	0.70	0.40	22.00	53.75	5.47	328.3	61.25	5267.52	2460.88	1236.97	5207.20	128.47	7628.45	2485.91	1249.56	7275.33
47.3	43.1	15	0.35	0.70	0.40	22.00	53.88	5.47	329.1	61.25	5282.92	2462.71	1237.90	5220.53	128.71	7660.80	2490.57	1251.90	7304.50
47.4	43.2	15	0.35	0.70	0.40	22.00	54.00	5.47	329.8	61.25	5298.31	2464.55	1238.82	5233.86	128.95	7693.21	2495.24	1254.24	7333.72
47.5	43.3	15	0.35	0.70	0.40	22.00	54.13	5.47	330.6	61.25	5313.70	2466.38	1239.74	5247.19	129.19	7725.68	2499.90	1256.59	7362.99
47.6	43.4	15	0.35	0.70	0.40	22.00	54.25	5.47	331.4	61.25	5329.10	2468.21	1240.66	5260.52	129.43	7758.21	2504.56	1258.93	7392.32
47.7	43.5	15	0.35	0.70	0.40	22.00	54.38	5.47	332.1	61.25	5344.49	2470.05	1241.58	5273.85	129.67	7790.80	2509.23	1261.27	7421.70
47.8	43.6	15	0.35	0.70	0.40	22.00	54.50	5.47	332.9	61.25	5359.88	2471.88	1242.50	5287.18	129.91	7823.45	2513.89	1263.62	7451.13
47.9	43.7	15	0.35	0.70	0.40	22.00	54.63	5.47	333.7	61.25	5375.28	2473.71	1243.42	5300.51	130.15	7856.16	2518.55	1265.96	7480.61
48.0	43.8	15	0.35	0.70	0.40	22.00	54.75	5.47	334.4	61.25	5390.67	2475.55	1244.35	5313.85	130.40	7888.93	2523.21	1268.31	7510.15
48.1	43.9	15	0.35	0.70	0.40	22.00	54.88	5.47	335.2	61.25	5406.07	2477.38	1245.27	5327.18	130.64	7921.77	2527.88	1270.65	7539.74
48.2	44.0	15	0.35	0.70	0.40	22.00	55.00	5.47	336.0	61.25	5421.46	2479.21	1246.19	5340.51	130.88	7954.66	2532.54	1272.99	7569.38
48.3	44.1	15	0.35	0.70	0.40	22.00	55.13	5.47	336.7	61.25	5436.85	2481.04	1247.11	5353.84	131.12	7987.61	2537.20	1275.34	7599.08
48.4	44.2	15	0.35	0.70	0.40	22.00	55.25	5.47	337.5	61.25	5452.25	2482.88	1248.03	5367.17	131.36	8020.63	2541.86	1277.68	7628.82
48.5	44.3	15	0.35	0.70	0.40	22.00	55.38	5.47	338.2	61.25	5467.64	2484.71	1248.95	5380.50	131.60	8053.70	2546.53	1280.02	7658.62
48.6	44.4	15	0.35	0.70	0.40	22.00	55.50	5.47	339.0	61.25	5483.03	2486.54	1249.87	5393.83	131.84	8086.84	2551.19	1282.37	7688.48
48.7	44.5	15	0.35	0.70	0.40	22.00	55.63	5.47	339.8	61.25	5498.43	2488.38	1250.79	5407.16	132.08	8120.03	2555.85	1284.71	7718.38
48.8	44.6	15	0.35	0.70	0.40	22.00	55.75	5.47	340.5	61.25	5513.82	2490.21	1251.72	5420.49	132.32	8153.29	2560.52	1287.06	7748.34
48.9	44.7	15	0.35	0.70	0.40	22.00	55.88	5.47	341.3	61.25	5529.22	2492.04	1252.64	5433.83	132.56	8186.61	2565.18	1289.40	7778.35
49.0	44.8	15	0.35	0.70	0.40	22.00	56.00	5.47	342.1	61.25	5544.61	2493.88	1253.56	5447.16	132.81	8219.98	2569.84	1291.74	7808.41
49.1	44.9	15	0.35	0.70	0.40	22.00	56.13	5.47	342.8	61.25	5560.00	2495.71	1254.48	5460.13	133.05	8253.42	2574.50	1294.09	7837.63
49.2	45.0	15	0.35	0.70	0.40	22.00	56.25	5.47	343.6	61.25	5575.40	2497.54	1255.40	5473.11	133.29	8286.92	2579.17	1296.43	7866.89
49.3	45.1	15	0.35	0.70	0.40	22.00	56.38	5.47	344.4	61.25	5590.79	2499.37	1256.32	5486.09	133.53	8320.48	2583.83	1298.77	7896.21
49.4	45.2	15	0.35	0.70	0.40	22.00	56.50	5.47	345.1	61.25	5606.19	2501.21	1257.24	5499.06	133.77	8354.10	2588.49	1301.12	7925.59
49.5	45.3	15	0.35	0.70	0.40	22.00	56.63	5.47	345.9	61.25	5621.58	2503.04	1258.17	5512.04	134.01	8387.78	2593.15	1303.46	7955.01
49.6	45.4	15	0.35	0.70	0.40	22.00	56.75	5.47	346.6	61.25	5636.97	2504.87	1259.09	5525.02	134.25	8421.52	2597.82	1305.81	7984.49
49.7	45.5	15	0.35	0.70	0.40	22.00	56.88	5.47	347.4	61.25	5652.37	2506.71	1260.01	5537.99	134.49	8455.32	2602.48	1308.15	8014.02
49.8	45.6	15	0.35	0.70	0.40	22.00	57.00	5.47	348.2	61.25	5667.76	2508.54	1260.93	5550.97	134.73	8489.19	2607.14	1310.49	8043.60
49.9	45.7	15	0.35	0.70	0.40	22.00	57.13	5.47	348.9	61.25	5683.15	2510.37	1261.85	5563.59	134.97	8523.11	2611.81	1312.84	8073.24
50.0	45.8	15	0.35	0.70	0.40	22.00	57.25	5.47	349.7	61.25	5698.55	2512.21	1262.77	5576.92	135.21	8557.09	2616.47	1315.18	8102.93

3.1.2 Calcolo per sollecitazioni di sfilamento

Seleziona per inserire la falda	VERO	
z_w (m)	**3.2**	
Caratteristiche del palo		**Seleziona per Grande Diametro**
d_{palo}(m)	**0.8**	VERO
A_{palo} (m^2)	0.5	
γ_{cls} (kN/m^3)	**25.0**	
$z_{testapalo}$ (m)	**4.2**	
Scgli tecnologia costruttiva	**Elica continua**	
Scegli il materiale	**CLS gettato in opera**	
Palo più sollecitato		
E_d (kN)	**-**	
Scegli la tipologia di sollecitazione	**Trazione**	
Scegli se considerare il peso del palo	**VERO**	
Applica coefficienti da NTC 2018	VERO	
γ_b resistenza alla base	1.3	
γ_s resistenza laterale compressione	1.15	
γ_{st} resistenza laterale trazione	1.25	
Numero verticali indagate	**1**	
ξ_3	1.7	
ξ_4	1.7	Seleziona per applicare ξ
ξ	**1.7**	FALSO
Esito verifica		
L (m)	R_d - breve termine	R_d - lungo termine
15	1564	

$z_{p.c.}$ (m)	$z_{t.p.}$ (m)	ID strato	α	k	tan δ	ϕ'_{calc} (°)	Nq	W_p (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)	s (kPa)	S (kN)	p (kPa)	P (kN)	Rd (kN)
0.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.5	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.6	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.7	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.8	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.9	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.5	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.7	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.1	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.2	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.3	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.4	0.0	1	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.6	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.7	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.8	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.9	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.0	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.1	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.2	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.3	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.5	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.8	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.9	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.0	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.1	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.2	0.0	2	0.70	0.70	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.3	0.1	2	0.70	0.70	0.00	0.00	0.00	0.8	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.76
4.4	0.2	2	0.70	0.70	0.00	0.00	0.00	1.5	0.00	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	1.53

Breve termine

Lungo termine

Palo

4.5	0.3	3	0.70	0.70	0.40	22.00	6.15	2.3	17.50	4.40	311.97	156.81	5.81	20.99	5.28	456.21	229.32	6.51
4.6	0.4	3	0.70	0.70	0.40	22.00	6.15	3.1	17.50	8.80	313.81	157.74	10.09	21.23	10.61	461.45	231.95	11.54
4.7	0.5	3	0.70	0.70	0.40	22.00	6.15	3.8	17.50	13.19	315.64	158.66	14.37	21.47	16.01	466.69	234.58	16.62
4.8	0.6	3	0.70	0.70	0.40	22.00	6.15	4.6	17.50	17.59	317.47	159.58	18.66	21.71	21.47	471.92	237.21	21.75
4.9	0.7	3	0.70	0.70	0.40	22.00	6.15	5.3	17.50	21.99	319.31	160.50	22.94	21.95	26.98	477.16	239.85	26.93
5.0	0.8	3	0.70	0.70	0.40	22.00	6.15	6.1	17.50	26.39	321.14	161.42	27.22	22.20	32.56	482.40	242.48	32.16
5.1	0.9	3	0.70	0.70	0.40	22.00	6.15	6.9	17.50	30.79	322.97	162.34	31.50	22.44	38.20	487.63	245.11	37.43
5.2	1.0	3	0.70	0.70	0.40	22.00	6.15	7.6	17.50	35.19	324.80	163.26	35.78	22.68	43.90	492.87	247.74	42.76
5.3	1.1	4	0.70	0.70	0.00	0.00	0.00	8.4	0.00	35.19	0.00	0.00	36.55	0.00	43.90	0.00	0.00	43.52
5.4	1.2	4	0.70	0.70	0.00	0.00	0.00	9.2	0.00	35.19	0.00	0.00	37.31	0.00	43.90	0.00	0.00	44.28
5.5	1.3	4	0.70	0.70	0.00	0.00	0.00	9.9	0.00	35.19	0.00	0.00	38.07	0.00	43.90	0.00	0.00	45.05
5.6	1.4	4	0.70	0.70	0.00	0.00	0.00	10.7	0.00	35.19	0.00	0.00	38.84	0.00	43.90	0.00	0.00	45.81
5.7	1.5	4	0.70	0.70	0.00	0.00	0.00	11.5	0.00	35.19	0.00	0.00	39.60	0.00	43.90	0.00	0.00	46.57
5.8	1.6	4	0.70	0.70	0.00	0.00	0.00	12.2	0.00	35.19	0.00	0.00	40.37	0.00	43.90	0.00	0.00	47.34
5.9	1.7	4	0.70	0.70	0.00	0.00	0.00	13.0	0.00	35.19	0.00	0.00	41.13	0.00	43.90	0.00	0.00	48.10
6.0	1.8	5	0.66	0.70	0.40	22.00	6.15	13.7	19.80	40.16	385.18	193.61	45.87	24.81	50.13	539.16	271.01	53.85
6.1	1.9	5	0.66	0.70	0.40	22.00	6.15	14.5	19.80	45.14	387.02	194.53	50.62	25.05	56.43	544.39	273.64	59.65
6.2	2.0	5	0.66	0.70	0.40	22.00	6.15	15.3	19.80	50.11	388.85	195.46	55.36	25.29	62.79	549.63	276.27	65.50
6.3	2.1	5	0.66	0.70	0.40	22.00	6.15	16.0	19.80	55.09	390.68	196.38	60.11	25.53	69.20	554.87	278.91	71.40
6.4	2.2	5	0.66	0.70	0.40	22.00	6.15	16.8	19.80	60.07	392.51	197.30	64.85	25.77	75.68	560.10	281.54	77.34
6.5	2.3	5	0.66	0.70	0.40	22.00	6.15	17.6	19.80	65.04	394.35	198.22	69.60	26.01	82.22	565.34	284.17	83.33
6.6	2.4	5	0.66	0.70	0.40	22.00	6.15	18.3	19.80	70.02	396.18	199.14	74.34	26.25	88.81	570.58	286.80	89.38
6.7	2.5	5	0.66	0.70	0.40	22.00	6.15	19.1	19.80	75.00	398.01	200.06	79.09	26.49	95.47	575.81	289.44	95.47
6.8	2.6	5	0.66	0.70	0.40	22.00	6.15	19.9	19.80	79.97	399.85	200.98	83.83	26.73	102.19	581.05	292.07	101.61
6.9	2.7	5	0.66	0.70	0.40	22.00	6.15	20.6	19.80	84.95	401.68	201.91	88.57	26.98	108.97	586.29	294.70	107.79
7.0	2.8	5	0.66	0.70	0.40	22.00	6.15	21.4	19.80	89.92	403.51	202.83	93.32	27.22	115.81	591.53	297.33	114.03
7.1	2.9	5	0.66	0.70	0.40	22.00	6.15	22.1	19.80	94.90	405.35	203.75	98.06	27.46	122.71	596.76	299.97	120.31
7.2	3.0	5	0.66	0.70	0.40	22.00	6.15	22.9	19.80	99.88	407.18	204.67	102.81	27.70	129.68	602.00	302.60	126.65
7.3	3.1	5	0.66	0.70	0.40	22.00	6.15	23.7	19.80	104.85	409.01	205.59	107.55	27.94	136.70	607.24	305.23	133.03
7.4	3.2	5	0.66	0.70	0.40	22.00	6.15	24.4	19.80	109.83	410.84	206.51	112.30	28.18	143.78	612.47	307.86	139.46
7.5	3.3	5	0.66	0.70	0.40	22.00	6.15	25.2	19.80	114.81	412.68	207.43	117.04	28.42	150.92	617.71	310.50	145.93
7.6	3.4	5	0.66	0.70	0.40	22.00	6.15	26.0	19.80	119.78	414.51	208.36	121.79	28.66	158.13	622.95	313.13	152.46
7.7	3.5	5	0.66	0.70	0.40	22.00	6.15	26.7	19.80	124.76	416.34	209.28	126.53	28.90	165.39	628.18	315.76	159.04
7.8	3.6	5	0.66	0.70	0.40	22.00	6.15	27.5	19.80	129.74	418.18	210.20	131.28	29.14	172.72	633.42	318.39	165.66
7.9	3.7	5	0.66	0.70	0.40	22.00	6.15	28.3	19.80	134.71	420.01	211.12	136.02	29.39	180.10	638.66	321.02	172.33
8.0	3.8	5	0.66	0.70	0.40	22.00	6.15	29.0	19.80	139.69	421.84	212.04	140.76	29.63	187.55	643.90	323.66	179.05
8.1	3.9	5	0.66	0.70	0.40	22.00	6.15	29.8	19.80	144.66	423.68	212.96	145.51	29.87	195.05	649.13	326.29	185.82
8.2	4.0	5	0.66	0.70	0.40	22.00	6.15	30.5	19.80	149.64	425.51	213.88	150.25	30.11	202.62	654.37	328.92	192.64
8.3	4.1	5	0.66	0.70	0.40	22.00	6.15	31.3	19.80	154.62	427.34	214.81	155.00	30.35	210.25	659.61	331.55	199.50
8.4	4.2	5	0.66	0.70	0.40	22.00	6.15	32.1	19.80	159.59	429.17	215.73	159.74	30.59	217.94	664.84	334.19	206.42
8.5	4.3	5	0.66	0.70	0.40	22.00	6.15	32.8	19.80	164.57	431.01	216.65	164.49	30.83	225.68	670.08	336.82	213.38
8.6	4.4	5	0.66	0.70	0.40	22.00	6.15	33.6	19.80	169.55	432.84	217.57	169.23	31.07	233.49	675.32	339.45	220.39
8.7	4.5	5	0.66	0.70	0.40	22.00	6.15	34.4	19.80	174.52	434.67	218.49	173.98	31.31	241.36	680.55	342.08	227.45
8.8	4.6	5	0.66	0.70	0.40	22.00	6.15	35.1	19.80	179.50	436.51	219.41	178.72	31.55	249.29	685.79	344.72	234.56
8.9	4.7	5	0.66	0.70	0.40	22.00	6.15	35.9	19.80	184.47	438.34	220.33	183.47	31.80	257.29	691.03	347.35	241.71
9.0	4.8	5	0.66	0.70	0.40	22.00	6.15	36.6	19.80	189.45	440.17	221.25	188.21	32.04	265.34	696.27	349.98	248.92
9.1	4.9	5	0.66	0.70	0.40	22.00	6.15	37.4	19.80	194.43	442.01	222.18	192.95	32.28	273.45	701.50	352.61	256.17

9.2	5.0	5	0.66	0.70	0.40	22.00	6.15	38.2	19.80	199.40	443.84	223.10	197.70	32.52	281.62	706.74	355.25	263.47
9.3	5.1	5	0.66	0.70	0.40	22.00	6.15	38.9	19.80	204.38	445.67	224.02	202.44	32.76	289.85	711.98	357.88	270.82
9.4	5.2	5	0.66	0.70	0.40	22.00	6.15	39.7	19.80	209.36	447.50	224.94	207.19	33.00	298.15	717.21	360.51	278.22
9.5	5.3	5	0.66	0.70	0.40	22.00	6.15	40.5	19.80	214.33	449.34	225.86	211.93	33.24	306.50	722.45	363.14	285.67
9.6	5.4	5	0.66	0.70	0.40	22.00	6.15	41.2	19.80	219.31	451.17	226.78	216.68	33.48	314.92	727.69	365.78	293.16
9.7	5.5	5	0.66	0.70	0.40	22.00	6.15	42.0	19.80	224.28	453.00	227.70	221.42	33.72	323.39	732.93	368.41	300.71
9.8	5.6	5	0.66	0.70	0.40	22.00	6.15	42.8	19.80	229.26	454.84	228.63	226.17	33.96	331.93	738.16	371.04	308.30
9.9	5.7	6	0.70	0.70	0.67	33.80	30.26	43.5	56.72	243.52	3662.50	1840.97	238.33	56.72	346.18	3662.50	1840.97	320.47
10.0	5.8	6	0.70	0.70	0.67	33.80	30.26	44.3	57.17	257.88	3691.36	1855.48	250.59	57.17	360.55	3691.36	1855.48	332.73
10.1	5.9	6	0.70	0.70	0.67	33.80	30.26	45.0	57.62	272.37	3720.23	1869.99	262.94	57.62	375.03	3720.23	1869.99	345.08
10.2	6.0	6	0.70	0.70	0.67	33.80	30.26	45.8	58.06	286.96	3749.10	1884.50	275.38	58.06	389.63	3749.10	1884.50	357.51
10.3	6.1	6	0.70	0.70	0.67	33.80	30.26	46.6	58.51	301.66	3777.96	1899.01	287.91	58.51	404.33	3777.96	1899.01	370.04
10.4	6.2	6	0.70	0.70	0.67	33.80	30.26	47.3	58.96	316.48	3806.83	1913.52	300.52	58.96	419.15	3806.83	1913.52	382.66
10.5	6.3	6	0.70	0.70	0.67	33.80	30.26	48.1	59.40	331.41	3835.69	1928.03	313.23	59.40	434.08	3835.69	1928.03	395.37
10.6	6.4	6	0.70	0.70	0.67	33.80	30.26	48.9	59.85	346.45	3864.56	1942.54	326.03	59.85	449.12	3864.56	1942.54	408.16
10.7	6.5	7	0.50	0.70	0.40	22.00	6.14	49.6	25.00	352.74	652.15	327.81	331.82	36.36	458.26	789.69	396.94	416.24
10.8	6.6	7	0.50	0.70	0.40	22.00	6.14	50.4	25.00	359.02	653.98	328.73	337.61	36.60	467.46	794.29	399.26	424.36
10.9	6.7	7	0.50	0.70	0.40	22.00	6.13	51.2	25.00	365.30	655.82	329.65	343.40	36.85	476.72	798.89	401.56	432.53
11.0	6.8	7	0.50	0.70	0.40	22.00	6.13	51.9	25.00	371.59	657.65	330.57	349.19	37.09	486.04	803.47	403.87	440.75
11.1	6.9	7	0.50	0.70	0.40	22.00	6.12	52.7	25.00	377.87	659.48	331.49	354.98	37.33	495.42	808.04	406.16	449.02
11.2	7.0	7	0.50	0.70	0.40	22.00	6.12	53.4	25.00	384.15	661.31	332.41	360.77	37.57	504.86	812.59	408.45	457.34
11.3	7.1	7	0.50	0.70	0.40	22.00	6.11	54.2	25.00	390.44	663.15	333.33	366.56	37.81	514.37	817.14	410.74	465.70
11.4	7.2	7	0.50	0.70	0.40	22.00	6.11	55.0	25.00	396.72	664.98	334.26	372.35	38.05	523.93	821.67	413.02	474.12
11.5	7.3	7	0.50	0.70	0.40	22.00	6.10	55.7	25.00	403.00	666.81	335.18	378.14	38.29	533.55	826.20	415.29	482.58
11.6	7.4	7	0.50	0.70	0.40	22.00	6.10	56.5	25.00	409.29	668.65	336.10	383.93	38.53	543.24	830.71	417.56	491.09
11.7	7.5	8	0.70	0.70	0.00	0.00	0.00	57.3	0.00	409.29	0.00	0.00	384.69	0.00	543.24	0.00	0.00	491.86
11.8	7.6	8	0.70	0.70	0.00	0.00	0.00	58.0	0.00	409.29	0.00	0.00	385.46	0.00	543.24	0.00	0.00	492.62
11.9	7.7	9	0.70	0.70	0.86	40.70	59.87	58.8	83.75	430.34	8327.77	4186.00	403.06	83.75	564.29	8327.77	4186.00	510.22
12.0	7.8	9	0.70	0.70	0.86	40.70	59.83	59.6	84.33	451.53	8380.03	4212.26	420.78	84.33	585.48	8380.03	4212.26	527.94
12.1	7.9	9	0.70	0.70	0.86	40.70	59.80	60.3	84.90	472.87	8432.17	4238.47	438.61	84.90	606.82	8432.17	4238.47	545.77
12.2	8.0	9	0.70	0.70	0.86	40.70	59.76	61.1	85.48	494.35	8484.22	4264.63	456.56	85.48	628.30	8484.22	4264.63	563.72
12.3	8.1	9	0.70	0.70	0.86	40.70	59.73	61.8	86.05	515.98	8536.15	4290.74	474.63	86.05	649.93	8536.15	4290.74	581.79
12.4	8.2	9	0.70	0.70	0.86	40.70	59.69	62.6	86.63	537.75	8587.98	4316.79	492.81	86.63	671.70	8587.98	4316.79	599.97
12.5	8.3	9	0.70	0.70	0.86	40.70	59.65	63.4	87.20	559.66	8639.71	4342.79	511.10	87.20	693.62	8639.71	4342.79	618.27
12.6	8.4	9	0.70	0.70	0.86	40.70	59.62	64.1	87.77	581.72	8691.32	4368.73	529.52	87.77	715.68	8691.32	4368.73	636.68
12.7	8.5	9	0.70	0.70	0.86	40.70	59.58	64.9	88.35	603.93	8742.82	4394.62	548.04	88.35	737.88	8742.82	4394.62	655.21
12.8	8.6	9	0.70	0.70	0.86	40.70	59.55	65.7	88.92	626.28	8794.22	4420.46	566.69	88.92	760.23	8794.22	4420.46	673.85
12.9	8.7	9	0.70	0.70	0.86	40.70	59.51	66.4	89.50	648.77	8845.50	4446.23	585.44	89.50	782.72	8845.50	4446.23	692.61
13.0	8.8	9	0.70	0.70	0.86	40.70	59.47	67.2	90.07	671.41	8896.67	4471.96	604.32	90.07	805.36	8896.67	4471.96	711.48
13.1	8.9	9	0.70	0.70	0.86	40.70	59.43	68.0	90.65	694.19	8947.73	4497.62	623.31	90.65	828.14	8947.73	4497.62	730.47
13.2	9.0	9	0.70	0.70	0.86	40.70	59.39	68.7	91.22	717.12	8998.68	4523.23	642.41	91.22	851.07	8998.68	4523.23	749.57
13.3	9.1	9	0.70	0.70	0.86	40.70	59.36	69.5	91.80	740.19	9049.50	4548.78	661.63	91.80	874.14	9049.50	4548.78	768.79
13.4	9.2	9	0.70	0.70	0.86	40.70	59.32	70.2	92.37	763.40	9100.22	4574.27	680.97	92.37	897.36	9100.22	4574.27	788.13
13.5	9.3	10	0.70	0.70	0.00	0.00	0.00	71.0	0.00	763.40	0.00	0.00	681.73	0.00	897.36	0.00	0.00	788.89
13.6	9.4	10	0.70	0.70	0.00	0.00	0.00	71.8	0.00	763.40	0.00	0.00	682.49	0.00	897.36	0.00	0.00	789.66
13.7	9.5	10	0.70	0.70	0.00	0.00	0.00	72.5	0.00	763.40	0.00	0.00	683.26	0.00	897.36	0.00	0.00	790.42
13.8	9.6	10	0.70	0.70	0.00	0.00	0.00	73.3	0.00	763.40	0.00	0.00	684.02	0.00	897.36	0.00	0.00	791.18

13.9	9.7	10	0.70	0.70	0.00	0.00	0.00	74.1	0.00	763.40	0.00	0.00	684.79	0.00	897.36	0.00	0.00	791.95
14.0	9.8	10	0.70	0.70	0.00	0.00	0.00	74.8	0.00	763.40	0.00	0.00	685.55	0.00	897.36	0.00	0.00	792.71
14.1	9.9	10	0.70	0.70	0.00	0.00	0.00	75.6	0.00	763.40	0.00	0.00	686.31	0.00	897.36	0.00	0.00	793.47
14.2	10.0	10	0.70	0.70	0.00	0.00	0.00	76.4	0.00	763.40	0.00	0.00	687.08	0.00	897.36	0.00	0.00	794.24
14.3	10.1	10	0.70	0.70	0.00	0.00	0.00	77.1	0.00	763.40	0.00	0.00	687.84	0.00	897.36	0.00	0.00	795.00
14.4	10.2	10	0.70	0.70	0.00	0.00	0.00	77.9	0.00	763.40	0.00	0.00	688.60	0.00	897.36	0.00	0.00	795.76
14.5	10.3	10	0.70	0.70	0.00	0.00	0.00	78.6	0.00	763.40	0.00	0.00	689.37	0.00	897.36	0.00	0.00	796.53
14.6	10.4	11	0.70	0.70	0.86	40.70	58.83	79.4	99.26	788.35	9699.41	4875.45	710.09	99.26	922.30	9699.41	4875.45	817.25
14.7	10.5	11	0.70	0.70	0.86	40.70	58.79	80.2	99.84	813.44	9748.53	4900.15	730.92	99.84	947.39	9748.53	4900.15	838.09
14.8	10.6	11	0.70	0.70	0.86	40.70	58.75	80.9	100.41	838.68	9797.52	4924.77	751.88	100.41	972.63	9797.52	4924.77	859.04
14.9	10.7	11	0.70	0.70	0.86	40.70	58.71	81.7	100.99	864.06	9846.39	4949.33	772.95	100.99	998.01	9846.39	4949.33	880.11
15.0	10.8	11	0.70	0.70	0.86	40.70	58.66	82.5	101.56	889.58	9895.12	4973.83	794.13	101.56	1023.54	9895.12	4973.83	901.29
15.1	10.9	11	0.70	0.70	0.86	40.70	58.62	83.2	102.13	915.25	9943.72	4998.26	815.43	102.13	1049.21	9943.72	4998.26	922.59
15.2	11.0	11	0.70	0.70	0.86	40.70	58.58	84.0	102.71	941.07	9992.19	5022.62	836.84	102.71	1075.02	9992.19	5022.62	944.00
15.3	11.1	11	0.70	0.70	0.86	40.70	58.53	84.8	103.28	967.02	10040.52	5046.92	858.37	103.28	1100.98	10040.52	5046.92	965.53
15.4	11.2	11	0.70	0.70	0.86	40.70	58.49	85.5	103.86	993.13	10088.72	5071.15	880.02	103.86	1127.08	10088.72	5071.15	987.18
15.5	11.3	11	0.70	0.70	0.86	40.70	58.44	86.3	104.43	1019.37	10136.79	5095.30	901.78	104.43	1153.33	10136.79	5095.30	1008.94
15.6	11.4	11	0.70	0.70	0.86	40.70	58.40	87.0	105.01	1045.76	10184.71	5119.40	923.65	105.01	1179.72	10184.71	5119.40	1030.82
15.7	11.5	11	0.70	0.70	0.86	40.70	58.35	87.8	105.58	1072.30	10232.50	5143.42	945.65	105.58	1206.25	10232.50	5143.42	1052.81
15.8	11.6	11	0.70	0.70	0.86	40.70	58.31	88.6	106.16	1098.98	10280.15	5167.37	967.75	106.16	1232.93	10280.15	5167.37	1074.92
15.9	11.7	11	0.70	0.70	0.86	40.70	58.26	89.3	106.73	1125.80	10327.66	5191.25	989.98	106.73	1259.76	10327.66	5191.25	1097.14
16.0	11.8	11	0.70	0.70	0.86	40.70	58.22	90.1	107.30	1152.77	10375.03	5215.06	1012.31	107.30	1286.72	10375.03	5215.06	1119.48
16.1	11.9	11	0.70	0.70	0.86	40.70	58.17	90.9	107.88	1179.89	10422.26	5238.80	1034.77	107.88	1313.84	10422.26	5238.80	1141.93
16.2	12.0	11	0.70	0.70	0.86	40.70	58.12	91.6	108.45	1207.14	10469.34	5262.47	1057.34	108.45	1341.09	10469.34	5262.47	1164.50
16.3	12.1	12	0.70	0.70	0.00	0.00	0.00	92.4	0.00	1207.14	0.00	0.00	1058.10	0.00	1341.09	0.00	0.00	1165.26
16.4	12.2	12	0.70	0.70	0.00	0.00	0.00	93.2	0.00	1207.14	0.00	0.00	1058.86	0.00	1341.09	0.00	0.00	1166.03
16.5	12.3	12	0.70	0.70	0.00	0.00	0.00	93.9	0.00	1207.14	0.00	0.00	1059.63	0.00	1341.09	0.00	0.00	1166.79
16.6	12.4	12	0.70	0.70	0.00	0.00	0.00	94.7	0.00	1207.14	0.00	0.00	1060.39	0.00	1341.09	0.00	0.00	1167.55
16.7	12.5	12	0.70	0.70	0.00	0.00	0.00	95.4	0.00	1207.14	0.00	0.00	1061.16	0.00	1341.09	0.00	0.00	1168.32
16.8	12.6	12	0.70	0.70	0.00	0.00	0.00	96.2	0.00	1207.14	0.00	0.00	1061.92	0.00	1341.09	0.00	0.00	1169.08
16.9	12.7	12	0.70	0.70	0.00	0.00	0.00	97.0	0.00	1207.14	0.00	0.00	1062.68	0.00	1341.09	0.00	0.00	1169.84
17.0	12.8	12	0.70	0.70	0.00	0.00	0.00	97.7	0.00	1207.14	0.00	0.00	1063.45	0.00	1341.09	0.00	0.00	1170.61
17.1	12.9	12	0.70	0.70	0.00	0.00	0.00	98.5	0.00	1207.14	0.00	0.00	1064.21	0.00	1341.09	0.00	0.00	1171.37
17.2	13.0	12	0.70	0.70	0.00	0.00	0.00	99.3	0.00	1207.14	0.00	0.00	1064.97	0.00	1341.09	0.00	0.00	1172.13
17.3	13.1	13	0.70	0.70	0.86	40.70	57.65	100.0	114.77	1235.99	10988.56	5523.45	1088.81	114.77	1369.94	10988.56	5523.45	1195.97
17.4	13.2	13	0.70	0.70	0.86	40.70	57.62	100.8	115.35	1264.98	11037.72	5548.16	1112.77	115.35	1398.93	11037.72	5548.16	1219.93
17.5	13.3	13	0.70	0.70	0.86	40.70	57.59	101.5	115.92	1294.11	11086.82	5572.85	1136.84	115.92	1428.06	11086.82	5572.85	1244.00
17.6	13.4	13	0.70	0.70	0.86	40.70	57.56	102.3	116.49	1323.39	11135.87	5597.50	1161.02	116.49	1457.34	11135.87	5597.50	1268.19
17.7	13.5	13	0.70	0.70	0.86	40.70	57.52	103.1	117.07	1352.81	11184.87	5622.13	1185.33	117.07	1486.76	11184.87	5622.13	1292.49
17.8	13.6	13	0.70	0.70	0.86	40.70	57.49	103.8	117.64	1382.38	11233.81	5646.73	1209.74	117.64	1516.33	11233.81	5646.73	1316.91
17.9	13.7	13	0.70	0.70	0.86	40.70	57.46	104.6	118.22	1412.09	11282.69	5671.30	1234.28	118.22	1546.04	11282.69	5671.30	1341.44
18.0	13.8	13	0.70	0.70	0.86	40.70	57.43	105.4	118.79	1441.95	11331.52	5695.85	1258.92	118.79	1575.90	11331.52	5695.85	1366.09
18.1	13.9	13	0.70	0.70	0.86	40.70	57.40	106.1	119.37	1471.95	11380.30	5720.36	1283.69	119.37	1605.90	11380.30	5720.36	1390.85
18.2	14.0	13	0.70	0.70	0.86	40.70	57.37	106.9	119.94	1502.09	11429.02	5744.85	1308.57	119.94	1636.04	11429.02	5744.85	1415.73
18.3	14.1	13	0.70	0.70	0.86	40.70	57.34	107.7	120.52	1532.38	11477.69	5769.31	1333.56	120.52	1666.33	11477.69	5769.31	1440.72
18.4	14.2	13	0.70	0.70	0.86	40.70	57.31	108.4	121.09	1562.81	11526.30	5793.75	1358.67	121.09	1696.76	11526.30	5793.75	1465.83
18.5	14.3	13	0.70	0.70	0.86	40.70	57.28	109.2	121.66	1593.39	11574.85	5818.16	1383.90	121.66	1727.34	11574.85	5818.16	1491.06

18.6	14.4	13	0.70	0.70	0.86	40.70	57.25	109.9	122.24	1624.11	11623.36	5842.54	1409.24	122.24	1758.06	11623.36	5842.54	1516.40
18.7	14.5	13	0.70	0.70	0.86	40.70	57.22	110.7	122.81	1654.98	11671.80	5866.89	1434.69	122.81	1788.93	11671.80	5866.89	1541.86
18.8	14.6	13	0.70	0.70	0.86	40.70	57.19	111.5	123.39	1685.99	11720.20	5891.21	1460.27	123.39	1819.94	11720.20	5891.21	1567.43
18.9	14.7	13	0.70	0.70	0.86	40.70	57.16	112.2	123.96	1717.14	11768.54	5915.51	1485.95	123.96	1851.10	11768.54	5915.51	1593.12
19.0	14.8	13	0.70	0.70	0.86	40.70	57.13	113.0	124.54	1748.44	11816.82	5939.78	1511.76	124.54	1882.40	11816.82	5939.78	1618.92
19.1	14.9	13	0.70	0.70	0.86	40.70	57.10	113.8	125.11	1779.89	11865.05	5964.02	1537.68	125.11	1913.84	11865.05	5964.02	1644.84
19.2	15.0	13	0.70	0.70	0.86	40.70	57.07	114.5	125.68	1811.47	11913.23	5988.24	1563.71	125.68	1945.43	11913.23	5988.24	1670.87
19.3	15.1	13	0.70	0.70	0.86	40.70	57.04	115.3	126.26	1843.21	11961.35	6012.43	1589.86	126.26	1977.16	11961.35	6012.43	1697.02
19.4	15.2	13	0.70	0.70	0.86	40.70	57.01	116.1	126.83	1875.08	12009.42	6036.59	1616.12	126.83	2009.04	12009.42	6036.59	1723.29
19.5	15.3	13	0.70	0.70	0.86	40.70	56.98	116.8	127.41	1907.11	12057.43	6060.72	1642.50	127.41	2041.06	12057.43	6060.72	1749.67
19.6	15.4	13	0.70	0.70	0.86	40.70	56.95	117.6	127.98	1939.27	12105.39	6084.83	1669.00	127.98	2073.22	12105.39	6084.83	1776.16
19.7	15.5	13	0.70	0.70	0.86	40.70	56.92	118.3	128.56	1971.58	12153.29	6108.91	1695.61	128.56	2105.53	12153.29	6108.91	1802.77
19.8	15.6	13	0.70	0.70	0.86	40.70	56.89	119.1	129.13	2004.03	12201.14	6132.96	1722.34	129.13	2137.99	12201.14	6132.96	1829.50
19.9	15.7	14	0.70	0.70	0.00	0.00	0.00	119.9	0.00	2004.03	0.00	0.00	1723.10	0.00	2137.99	0.00	0.00	1830.26
20.0	15.8	14	0.70	0.70	0.00	0.00	0.00	120.6	0.00	2004.03	0.00	0.00	1723.87	0.00	2137.99	0.00	0.00	1831.03
20.1	15.9	14	0.70	0.70	0.00	0.00	0.00	121.4	0.00	2004.03	0.00	0.00	1724.63	0.00	2137.99	0.00	0.00	1831.79
20.2	16.0	14	0.70	0.70	0.00	0.00	0.00	122.2	0.00	2004.03	0.00	0.00	1725.39	0.00	2137.99	0.00	0.00	1832.55
20.3	16.1	14	0.70	0.70	0.00	0.00	0.00	122.9	0.00	2004.03	0.00	0.00	1726.16	0.00	2137.99	0.00	0.00	1833.32
20.4	16.2	14	0.70	0.70	0.00	0.00	0.00	123.7	0.00	2004.03	0.00	0.00	1726.92	0.00	2137.99	0.00	0.00	1834.08
20.5	16.3	14	0.70	0.70	0.00	0.00	0.00	124.5	0.00	2004.03	0.00	0.00	1727.68	0.00	2137.99	0.00	0.00	1834.85
20.6	16.4	14	0.70	0.70	0.00	0.00	0.00	125.2	0.00	2004.03	0.00	0.00	1728.45	0.00	2137.99	0.00	0.00	1835.61
20.7	16.5	14	0.70	0.70	0.00	0.00	0.00	126.0	0.00	2004.03	0.00	0.00	1729.21	0.00	2137.99	0.00	0.00	1836.37
20.8	16.6	14	0.70	0.70	0.00	0.00	0.00	126.7	0.00	2004.03	0.00	0.00	1729.97	0.00	2137.99	0.00	0.00	1837.14
20.9	16.7	14	0.70	0.70	0.00	0.00	0.00	127.5	0.00	2004.03	0.00	0.00	1730.74	0.00	2137.99	0.00	0.00	1837.90
21.0	16.8	14	0.70	0.70	0.00	0.00	0.00	128.3	0.00	2004.03	0.00	0.00	1731.50	0.00	2137.99	0.00	0.00	1838.66
21.1	16.9	14	0.70	0.70	0.00	0.00	0.00	129.0	0.00	2004.03	0.00	0.00	1732.26	0.00	2137.99	0.00	0.00	1839.43
21.2	17.0	14	0.70	0.70	0.00	0.00	0.00	129.8	0.00	2004.03	0.00	0.00	1733.03	0.00	2137.99	0.00	0.00	1840.19
21.3	17.1	14	0.70	0.70	0.00	0.00	0.00	130.6	0.00	2004.03	0.00	0.00	1733.79	0.00	2137.99	0.00	0.00	1840.95
21.4	17.2	14	0.70	0.70	0.00	0.00	0.00	131.3	0.00	2004.03	0.00	0.00	1734.56	0.00	2137.99	0.00	0.00	1841.72
21.5	17.3	14	0.70	0.70	0.00	0.00	0.00	132.1	0.00	2004.03	0.00	0.00	1735.32	0.00	2137.99	0.00	0.00	1842.48
21.6	17.4	14	0.70	0.70	0.00	0.00	0.00	132.9	0.00	2004.03	0.00	0.00	1736.08	0.00	2137.99	0.00	0.00	1843.24
21.7	17.5	14	0.70	0.70	0.00	0.00	0.00	133.6	0.00	2004.03	0.00	0.00	1736.85	0.00	2137.99	0.00	0.00	1844.01
21.8	17.6	14	0.70	0.70	0.00	0.00	0.00	134.4	0.00	2004.03	0.00	0.00	1737.61	0.00	2137.99	0.00	0.00	1844.77
21.9	17.7	14	0.70	0.70	0.00	0.00	0.00	135.1	0.00	2004.03	0.00	0.00	1738.37	0.00	2137.99	0.00	0.00	1845.53
22.0	17.8	14	0.70	0.70	0.00	0.00	0.00	135.9	0.00	2004.03	0.00	0.00	1739.14	0.00	2137.99	0.00	0.00	1846.30
22.1	17.9	14	0.70	0.70	0.00	0.00	0.00	136.7	0.00	2004.03	0.00	0.00	1739.90	0.00	2137.99	0.00	0.00	1847.06
22.2	18.0	14	0.70	0.70	0.00	0.00	0.00	137.4	0.00	2004.03	0.00	0.00	1740.66	0.00	2137.99	0.00	0.00	1847.83
22.3	18.1	14	0.70	0.70	0.00	0.00	0.00	138.2	0.00	2004.03	0.00	0.00	1741.43	0.00	2137.99	0.00	0.00	1848.59
22.4	18.2	14	0.70	0.70	0.00	0.00	0.00	139.0	0.00	2004.03	0.00	0.00	1742.19	0.00	2137.99	0.00	0.00	1849.35
22.5	18.3	14	0.70	0.70	0.00	0.00	0.00	139.7	0.00	2004.03	0.00	0.00	1742.95	0.00	2137.99	0.00	0.00	1850.12
22.6	18.4	14	0.70	0.70	0.00	0.00	0.00	140.5	0.00	2004.03	0.00	0.00	1743.72	0.00	2137.99	0.00	0.00	1850.88
22.7	18.5	14	0.70	0.70	0.00	0.00	0.00	141.3	0.00	2004.03	0.00	0.00	1744.48	0.00	2137.99	0.00	0.00	1851.64
22.8	18.6	14	0.70	0.70	0.00	0.00	0.00	142.0	0.00	2004.03	0.00	0.00	1745.25	0.00	2137.99	0.00	0.00	1852.41
22.9	18.7	14	0.70	0.70	0.00	0.00	0.00	142.8	0.00	2004.03	0.00	0.00	1746.01	0.00	2137.99	0.00	0.00	1853.17
23.0	18.8	14	0.70	0.70	0.00	0.00	0.00	143.5	0.00	2004.03	0.00	0.00	1746.77	0.00	2137.99	0.00	0.00	1853.93
23.1	18.9	14	0.70	0.70	0.00	0.00	0.00	144.3	0.00	2004.03	0.00	0.00	1747.54	0.00	2137.99	0.00	0.00	1854.70
23.2	19.0	14	0.70	0.70	0.00	0.00	0.00	145.1	0.00	2004.03	0.00	0.00	1748.30	0.00	2137.99	0.00	0.00	1855.46

23.3	19.1	14	0.70	0.70	0.00	0.00	0.00	145.8	0.00	2004.03	0.00	0.00	1749.06	0.00	2137.99	0.00	0.00	1856.22
23.4	19.2	14	0.70	0.70	0.00	0.00	0.00	146.6	0.00	2004.03	0.00	0.00	1749.83	0.00	2137.99	0.00	0.00	1856.99
23.5	19.3	14	0.70	0.70	0.00	0.00	0.00	147.4	0.00	2004.03	0.00	0.00	1750.59	0.00	2137.99	0.00	0.00	1857.75
23.6	19.4	14	0.70	0.70	0.00	0.00	0.00	148.1	0.00	2004.03	0.00	0.00	1751.35	0.00	2137.99	0.00	0.00	1858.51
23.7	19.5	14	0.70	0.70	0.00	0.00	0.00	148.9	0.00	2004.03	0.00	0.00	1752.12	0.00	2137.99	0.00	0.00	1859.28
23.8	19.6	14	0.70	0.70	0.00	0.00	0.00	149.7	0.00	2004.03	0.00	0.00	1752.88	0.00	2137.99	0.00	0.00	1860.04
23.9	19.7	14	0.70	0.70	0.00	0.00	0.00	150.4	0.00	2004.03	0.00	0.00	1753.64	0.00	2137.99	0.00	0.00	1860.81
24.0	19.8	14	0.70	0.70	0.00	0.00	0.00	151.2	0.00	2004.03	0.00	0.00	1754.41	0.00	2137.99	0.00	0.00	1861.57
24.1	19.9	14	0.70	0.70	0.00	0.00	0.00	151.9	0.00	2004.03	0.00	0.00	1755.17	0.00	2137.99	0.00	0.00	1862.33
24.2	20.0	14	0.70	0.70	0.00	0.00	0.00	152.7	0.00	2004.03	0.00	0.00	1755.93	0.00	2137.99	0.00	0.00	1863.10
24.3	20.1	14	0.70	0.70	0.00	0.00	0.00	153.5	0.00	2004.03	0.00	0.00	1756.70	0.00	2137.99	0.00	0.00	1863.86
24.4	20.2	14	0.70	0.70	0.00	0.00	0.00	154.2	0.00	2004.03	0.00	0.00	1757.46	0.00	2137.99	0.00	0.00	1864.62
24.5	20.3	14	0.70	0.70	0.00	0.00	0.00	155.0	0.00	2004.03	0.00	0.00	1758.23	0.00	2137.99	0.00	0.00	1865.39
24.6	20.4	14	0.70	0.70	0.00	0.00	0.00	155.8	0.00	2004.03	0.00	0.00	1758.99	0.00	2137.99	0.00	0.00	1866.15
24.7	20.5	14	0.70	0.70	0.00	0.00	0.00	156.5	0.00	2004.03	0.00	0.00	1759.75	0.00	2137.99	0.00	0.00	1866.91
24.8	20.6	14	0.70	0.70	0.00	0.00	0.00	157.3	0.00	2004.03	0.00	0.00	1760.52	0.00	2137.99	0.00	0.00	1867.68
24.9	20.7	14	0.70	0.70	0.00	0.00	0.00	158.1	0.00	2004.03	0.00	0.00	1761.28	0.00	2137.99	0.00	0.00	1868.44
25.0	20.8	14	0.70	0.70	0.00	0.00	0.00	158.8	0.00	2004.03	0.00	0.00	1762.04	0.00	2137.99	0.00	0.00	1869.20
25.1	20.9	14	0.70	0.70	0.00	0.00	0.00	159.6	0.00	2004.03	0.00	0.00	1762.81	0.00	2137.99	0.00	0.00	1869.97
25.2	21.0	14	0.70	0.70	0.00	0.00	0.00	160.3	0.00	2004.03	0.00	0.00	1763.57	0.00	2137.99	0.00	0.00	1870.73
25.3	21.1	14	0.70	0.70	0.00	0.00	0.00	161.1	0.00	2004.03	0.00	0.00	1764.33	0.00	2137.99	0.00	0.00	1871.49
25.4	21.2	14	0.70	0.70	0.00	0.00	0.00	161.9	0.00	2004.03	0.00	0.00	1765.10	0.00	2137.99	0.00	0.00	1872.26
25.5	21.3	14	0.70	0.70	0.00	0.00	0.00	162.6	0.00	2004.03	0.00	0.00	1765.86	0.00	2137.99	0.00	0.00	1873.02
25.6	21.4	14	0.70	0.70	0.00	0.00	0.00	163.4	0.00	2004.03	0.00	0.00	1766.62	0.00	2137.99	0.00	0.00	1873.79
25.7	21.5	14	0.70	0.70	0.00	0.00	0.00	164.2	0.00	2004.03	0.00	0.00	1767.39	0.00	2137.99	0.00	0.00	1874.55
25.8	21.6	14	0.70	0.70	0.00	0.00	0.00	164.9	0.00	2004.03	0.00	0.00	1768.15	0.00	2137.99	0.00	0.00	1875.31
25.9	21.7	14	0.70	0.70	0.00	0.00	0.00	165.7	0.00	2004.03	0.00	0.00	1768.91	0.00	2137.99	0.00	0.00	1876.08
26.0	21.8	14	0.70	0.70	0.00	0.00	0.00	166.5	0.00	2004.03	0.00	0.00	1769.68	0.00	2137.99	0.00	0.00	1876.84
26.1	21.9	15	0.35	0.70	0.40	22.00	5.56	167.2	61.25	2019.43	2074.12	1042.57	1782.76	77.63	2157.50	1526.45	767.28	1893.21
26.2	22.0	15	0.35	0.70	0.40	22.00	5.56	168.0	61.25	2034.82	2075.95	1043.49	1795.84	77.87	2177.07	1530.53	769.33	1909.63
26.3	22.1	15	0.35	0.70	0.40	22.00	5.56	168.7	61.25	2050.22	2077.79	1044.41	1808.91	78.11	2196.70	1534.59	771.37	1926.10
26.4	22.2	15	0.35	0.70	0.40	22.00	5.55	169.5	61.25	2065.61	2079.62	1045.33	1821.99	78.35	2216.39	1538.66	773.41	1942.61
26.5	22.3	15	0.35	0.70	0.40	22.00	5.55	170.3	61.25	2081.00	2081.45	1046.25	1835.07	78.59	2236.14	1542.72	775.46	1959.18
26.6	22.4	15	0.35	0.70	0.40	22.00	5.55	171.0	61.25	2096.40	2083.28	1047.17	1848.15	78.83	2255.95	1546.78	777.50	1975.79
26.7	22.5	15	0.35	0.70	0.40	22.00	5.55	171.8	61.25	2111.79	2085.12	1048.09	1861.23	79.07	2275.82	1550.83	779.53	1992.45
26.8	22.6	15	0.35	0.70	0.40	22.00	5.54	172.6	61.25	2127.19	2086.95	1049.02	1874.31	79.31	2295.76	1554.88	781.57	2009.16
26.9	22.7	15	0.35	0.70	0.40	22.00	5.54	173.3	61.25	2142.58	2088.78	1049.94	1887.39	79.55	2315.75	1558.93	783.60	2025.92
27.0	22.8	15	0.35	0.70	0.40	22.00	5.54	174.1	61.25	2157.97	2090.62	1050.86	1900.46	79.79	2335.81	1562.97	785.63	2042.73
27.1	22.9	15	0.35	0.70	0.40	22.00	5.54	174.8	61.25	2173.37	2092.45	1051.78	1913.54	80.03	2355.92	1567.01	787.66	2059.59
27.2	23.0	15	0.35	0.70	0.40	22.00	5.53	175.6	61.25	2188.76	2094.28	1052.70	1926.62	80.28	2376.10	1571.04	789.69	2076.49
27.3	23.1	15	0.35	0.70	0.40	22.00	5.53	176.4	61.25	2204.15	2096.12	1053.62	1939.70	80.52	2396.33	1575.07	791.72	2093.44
27.4	23.2	15	0.35	0.70	0.40	22.00	5.53	177.1	61.25	2219.55	2097.95	1054.54	1952.78	80.76	2416.63	1579.10	793.74	2110.44
27.5	23.3	15	0.35	0.70	0.40	22.00	5.53	177.9	61.25	2234.94	2099.78	1055.47	1965.86	81.00	2436.99	1583.12	795.76	2127.49
27.6	23.4	15	0.35	0.70	0.40	22.00	5.53	178.7	61.25	2250.34	2101.61	1056.39	1978.94	81.24	2457.40	1587.14	797.78	2144.59
27.7	23.5	15	0.35	0.70	0.40	22.00	5.52	179.4	61.25	2265.73	2103.45	1057.31	1992.01	81.48	2477.88	1591.15	799.80	2161.74
27.8	23.6	15	0.35	0.70	0.40	22.00	5.52	180.2	61.25	2281.12	2105.28	1058.23	2005.09	81.72	2498.42	1595.17	801.82	2178.93
27.9	23.7	15	0.35	0.70	0.40	22.00	5.52	181.0	61.25	2296.52	2107.11	1059.15	2018.17	81.96	2519.02	1599.17	803.83	2196.17

28.0	23.8	15	0.35	0.70	0.40	22.00	5.52	181.7	61.25	2311.91	2108.95	1060.07	2031.25	82.20	2539.68	1603.18	805.84	2213.46
28.1	23.9	15	0.35	0.70	0.40	22.00	5.51	182.5	61.25	2327.30	2110.78	1060.99	2044.33	82.44	2560.40	1607.18	807.86	2230.80
28.2	24.0	15	0.35	0.70	0.40	22.00	5.51	183.2	61.25	2342.70	2112.61	1061.91	2057.41	82.69	2581.18	1611.17	809.86	2248.19
28.3	24.1	15	0.35	0.70	0.40	22.00	5.51	184.0	61.25	2358.09	2114.45	1062.84	2070.49	82.93	2602.02	1615.17	811.87	2265.63
28.4	24.2	15	0.35	0.70	0.40	22.00	5.51	184.8	61.25	2373.49	2116.28	1063.76	2083.56	83.17	2622.93	1619.15	813.88	2283.12
28.5	24.3	15	0.35	0.70	0.40	22.00	5.50	185.5	61.25	2388.88	2118.11	1064.68	2096.64	83.41	2643.89	1623.14	815.88	2300.65
28.6	24.4	15	0.35	0.70	0.40	22.00	5.50	186.3	61.25	2404.27	2119.94	1065.60	2109.72	83.65	2664.91	1627.12	817.88	2318.23
28.7	24.5	15	0.35	0.70	0.40	22.00	5.50	187.1	61.25	2419.67	2121.78	1066.52	2122.80	83.89	2686.00	1631.10	819.88	2335.86
28.8	24.6	15	0.35	0.70	0.40	22.00	5.50	187.8	61.25	2435.06	2123.61	1067.44	2135.88	84.13	2707.14	1635.07	821.88	2353.54
28.9	24.7	15	0.35	0.70	0.40	22.00	5.49	188.6	61.25	2450.46	2125.44	1068.36	2148.96	84.37	2728.34	1639.04	823.87	2371.27
29.0	24.8	15	0.35	0.70	0.40	22.00	5.49	189.4	61.25	2465.85	2127.28	1069.29	2162.04	84.61	2749.61	1643.01	825.87	2389.04
29.1	24.9	15	0.35	0.70	0.40	22.00	5.49	190.1	61.25	2481.24	2129.11	1070.21	2175.11	84.85	2770.94	1646.97	827.86	2406.87
29.2	25.0	15	0.35	0.70	0.40	22.00	5.49	190.9	61.25	2496.64	2130.94	1071.13	2188.19	85.09	2792.32	1650.93	829.85	2424.74
29.3	25.1	15	0.35	0.70	0.40	22.00	5.48	191.6	61.25	2512.03	2132.78	1072.05	2201.27	85.34	2813.77	1654.88	831.84	2442.66
29.4	25.2	15	0.35	0.70	0.40	22.00	5.48	192.4	61.25	2527.42	2134.61	1072.97	2214.35	85.58	2835.28	1658.83	833.82	2460.63
29.5	25.3	15	0.35	0.70	0.40	22.00	5.48	193.2	61.25	2542.82	2136.44	1073.89	2227.43	85.82	2856.85	1662.78	835.81	2478.65
29.6	25.4	15	0.35	0.70	0.40	22.00	5.48	193.9	61.25	2558.21	2138.27	1074.81	2240.51	86.06	2878.48	1666.73	837.79	2496.72
29.7	25.5	15	0.35	0.70	0.40	22.00	5.48	194.7	61.25	2573.61	2140.11	1075.74	2253.59	86.30	2900.17	1670.67	839.77	2514.83
29.8	25.6	15	0.35	0.70	0.40	22.00	5.47	195.5	61.25	2589.00	2141.94	1076.66	2266.66	86.54	2921.92	1674.60	841.75	2533.00
29.9	25.7	15	0.35	0.70	0.40	22.00	5.47	196.2	61.25	2604.39	2143.77	1077.58	2279.74	86.78	2943.73	1679.26	844.09	2551.21
30.0	25.8	15	0.35	0.70	0.40	22.00	5.47	197.0	61.25	2619.79	2145.61	1078.50	2292.82	87.02	2965.60	1683.93	846.43	2569.47
30.1	25.9	15	0.35	0.70	0.40	22.00	5.47	197.8	61.25	2635.18	2147.44	1079.42	2305.90	87.26	2987.53	1688.59	848.78	2587.78
30.2	26.0	15	0.35	0.70	0.40	22.00	5.47	198.5	61.25	2650.57	2149.27	1080.34	2318.98	87.50	3009.52	1693.25	851.12	2606.14
30.3	26.1	15	0.35	0.70	0.40	22.00	5.47	199.3	61.25	2665.97	2151.11	1081.26	2332.06	87.75	3031.57	1697.91	853.46	2624.54
30.4	26.2	15	0.35	0.70	0.40	22.00	5.47	200.0	61.25	2681.36	2152.94	1082.18	2345.14	87.99	3053.69	1702.58	855.81	2643.00
30.5	26.3	15	0.35	0.70	0.40	22.00	5.47	200.8	61.25	2696.76	2154.77	1083.11	2358.21	88.23	3075.86	1707.24	858.15	2661.50
30.6	26.4	15	0.35	0.70	0.40	22.00	5.47	201.6	61.25	2712.15	2156.60	1084.03	2371.29	88.47	3098.10	1711.90	860.50	2680.05
30.7	26.5	15	0.35	0.70	0.40	22.00	5.47	202.3	61.25	2727.54	2158.44	1084.95	2384.37	88.71	3120.39	1716.57	862.84	2698.65
30.8	26.6	15	0.35	0.70	0.40	22.00	5.47	203.1	61.25	2742.94	2160.27	1085.87	2397.45	88.95	3142.75	1721.23	865.18	2717.30
30.9	26.7	15	0.35	0.70	0.40	22.00	5.47	203.9	61.25	2758.33	2162.10	1086.79	2410.53	89.19	3165.16	1725.89	867.53	2735.99
31.0	26.8	15	0.35	0.70	0.40	22.00	5.47	204.6	61.25	2773.73	2163.94	1087.71	2423.61	89.43	3187.64	1730.55	869.87	2754.74
31.1	26.9	15	0.35	0.70	0.40	22.00	5.47	205.4	61.25	2789.12	2165.77	1088.63	2436.69	89.67	3210.18	1735.22	872.21	2773.53
31.2	27.0	15	0.35	0.70	0.40	22.00	5.47	206.2	61.25	2804.51	2167.60	1089.56	2449.76	89.91	3232.77	1739.88	874.56	2792.37
31.3	27.1	15	0.35	0.70	0.40	22.00	5.47	206.9	61.25	2819.91	2169.44	1090.48	2462.84	90.16	3255.43	1744.54	876.90	2811.26
31.4	27.2	15	0.35	0.70	0.40	22.00	5.47	207.7	61.25	2835.30	2171.27	1091.40	2475.92	90.40	3278.15	1749.20	879.25	2830.20
31.5	27.3	15	0.35	0.70	0.40	22.00	5.47	208.4	61.25	2850.69	2173.10	1092.32	2489.00	90.64	3300.93	1753.87	881.59	2849.19
31.6	27.4	15	0.35	0.70	0.40	22.00	5.47	209.2	61.25	2866.09	2174.93	1093.24	2502.08	90.88	3323.77	1758.53	883.93	2868.23
31.7	27.5	15	0.35	0.70	0.40	22.00	5.47	210.0	61.25	2881.48	2176.77	1094.16	2515.16	91.12	3346.67	1763.19	886.28	2887.31
31.8	27.6	15	0.35	0.70	0.40	22.00	5.47	210.7	61.25	2896.88	2178.60	1095.08	2528.24	91.36	3369.63	1767.86	888.62	2906.44
31.9	27.7	15	0.35	0.70	0.40	22.00	5.47	211.5	61.25	2912.27	2180.43	1096.01	2541.31	91.60	3392.66	1772.52	890.96	2925.62
32.0	27.8	15	0.35	0.70	0.40	22.00	5.47	212.3	61.25	2927.66	2182.27	1096.93	2554.39	91.84	3415.74	1777.18	893.31	2944.85
32.1	27.9	15	0.35	0.70	0.40	22.00	5.47	213.0	61.25	2943.06	2184.10	1097.85	2567.47	92.08	3438.88	1781.84	895.65	2964.13
32.2	28.0	15	0.35	0.70	0.40	22.00	5.47	213.8	61.25	2958.45	2185.93	1098.77	2580.55	92.32	3462.08	1786.51	898.00	2983.46
32.3	28.1	15	0.35	0.70	0.40	22.00	5.47	214.6	61.25	2973.84	2187.77	1099.69	2593.63	92.56	3485.35	1791.17	900.34	3002.83
32.4	28.2	15	0.35	0.70	0.40	22.00	5.47	215.3	61.25	2989.24	2189.60	1100.61	2606.71	92.81	3508.67	1795.83	902.68	3022.25
32.5	28.3	15	0.35	0.70	0.40	22.00	5.47	216.1	61.25	3004.63	2191.43	1101.53	2619.79	93.05	3532.06	1800.49	905.03	3041.73
32.6	28.4	15	0.35	0.70	0.40	22.00	5.47	216.8	61.25	3020.03	2193.26	1102.45	2632.86	93.29	3555.50	1805.16	907.37	3061.25

32.7	28.5	15	0.35	0.70	0.40	22.00	5.47	217.6	61.25	3035.42	2195.10	1103.38	2645.94	93.53	3579.01	1809.82	909.71	3080.82
32.8	28.6	15	0.35	0.70	0.40	22.00	5.47	218.4	61.25	3050.81	2196.93	1104.30	2659.02	93.77	3602.58	1814.48	912.06	3100.43
32.9	28.7	15	0.35	0.70	0.40	22.00	5.47	219.1	61.25	3066.21	2198.76	1105.22	2672.10	94.01	3626.20	1819.15	914.40	3120.10
33.0	28.8	15	0.35	0.70	0.40	22.00	5.47	219.9	61.25	3081.60	2200.60	1106.14	2685.18	94.25	3649.89	1823.81	916.75	3139.81
33.1	28.9	15	0.35	0.70	0.40	22.00	5.47	220.7	61.25	3097.00	2202.43	1107.06	2698.26	94.49	3673.64	1828.47	919.09	3159.57
33.2	29.0	15	0.35	0.70	0.40	22.00	5.47	221.4	61.25	3112.39	2204.26	1107.98	2711.34	94.73	3697.45	1833.13	921.43	3179.38
33.3	29.1	15	0.35	0.70	0.40	22.00	5.47	222.2	61.25	3127.78	2206.10	1108.90	2724.41	94.97	3721.32	1837.80	923.78	3199.24
33.4	29.2	15	0.35	0.70	0.40	22.00	5.47	223.0	61.25	3143.18	2207.93	1109.83	2737.49	95.22	3745.25	1842.46	926.12	3219.15
33.5	29.3	15	0.35	0.70	0.40	22.00	5.47	223.7	61.25	3158.57	2209.76	1110.75	2750.57	95.46	3769.24	1847.12	928.46	3239.11
33.6	29.4	15	0.35	0.70	0.40	22.00	5.47	224.5	61.25	3173.96	2211.59	1111.67	2763.65	95.70	3793.29	1851.78	930.81	3259.11
33.7	29.5	15	0.35	0.70	0.40	22.00	5.47	225.2	61.25	3189.36	2213.43	1112.59	2776.73	95.94	3817.40	1856.45	933.15	3279.17
33.8	29.6	15	0.35	0.70	0.40	22.00	5.47	226.0	61.25	3204.75	2215.26	1113.51	2789.81	96.18	3841.58	1861.11	935.50	3299.27
33.9	29.7	15	0.35	0.70	0.40	22.00	5.47	226.8	61.25	3220.15	2217.09	1114.43	2802.89	96.42	3865.81	1865.77	937.84	3319.42
34.0	29.8	15	0.35	0.70	0.40	22.00	5.47	227.5	61.25	3235.54	2218.93	1115.35	2815.96	96.66	3890.10	1870.43	940.18	3339.62
34.1	29.9	15	0.35	0.70	0.40	22.00	5.47	228.3	61.25	3250.93	2220.76	1116.28	2829.04	96.90	3914.46	1875.10	942.53	3359.86
34.2	30.0	15	0.35	0.70	0.40	22.00	5.47	229.1	61.25	3266.33	2222.59	1117.20	2842.12	97.14	3938.87	1879.76	944.87	3380.16
34.3	30.1	15	0.35	0.70	0.40	22.00	5.47	229.8	61.25	3281.72	2224.43	1118.12	2855.20	97.38	3963.35	1884.42	947.21	3400.50
34.4	30.2	15	0.35	0.70	0.40	22.00	5.47	230.6	61.25	3297.11	2226.26	1119.04	2868.28	97.62	3987.88	1889.09	949.56	3420.89
34.5	30.3	15	0.35	0.70	0.40	22.00	5.47	231.4	61.25	3312.51	2228.09	1119.96	2881.36	97.87	4012.48	1893.75	951.90	3441.33
34.6	30.4	15	0.35	0.70	0.40	22.00	5.47	232.1	61.25	3327.90	2229.92	1120.88	2894.44	98.11	4037.14	1898.41	954.25	3461.82
34.7	30.5	15	0.35	0.70	0.40	22.00	5.47	232.9	61.25	3343.30	2231.76	1121.80	2907.51	98.35	4061.85	1903.07	956.59	3482.36
34.8	30.6	15	0.35	0.70	0.40	22.00	5.47	233.6	61.25	3358.69	2233.59	1122.72	2920.59	98.59	4086.63	1907.74	958.93	3502.95
34.9	30.7	15	0.35	0.70	0.40	22.00	5.47	234.4	61.25	3374.08	2235.42	1123.65	2933.67	98.83	4111.47	1912.40	961.28	3523.58
35.0	30.8	15	0.35	0.70	0.40	22.00	5.47	235.2	61.25	3389.48	2237.26	1124.57	2946.75	99.07	4136.37	1917.06	963.62	3544.26
35.1	30.9	15	0.35	0.70	0.40	22.00	5.47	235.9	61.25	3404.87	2239.09	1125.49	2959.83	99.31	4161.33	1921.72	965.96	3565.00
35.2	31.0	15	0.35	0.70	0.40	22.00	5.47	236.7	61.25	3420.26	2240.92	1126.41	2972.91	99.55	4186.35	1926.39	968.31	3585.78
35.3	31.1	15	0.35	0.70	0.40	22.00	5.47	237.5	61.25	3435.66	2242.76	1127.33	2985.99	99.79	4211.43	1931.05	970.65	3606.60
35.4	31.2	15	0.35	0.70	0.40	22.00	5.47	238.2	61.25	3451.05	2244.59	1128.25	2999.06	100.03	4236.57	1935.71	973.00	3627.48
35.5	31.3	15	0.35	0.70	0.40	22.00	5.47	239.0	61.25	3466.45	2246.42	1129.17	3012.14	100.28	4261.77	1940.38	975.34	3648.41
35.6	31.4	15	0.35	0.70	0.40	22.00	5.47	239.7	61.25	3481.84	2248.25	1130.10	3025.22	100.52	4287.04	1945.04	977.68	3669.38
35.7	31.5	15	0.35	0.70	0.40	22.00	5.47	240.5	61.25	3497.23	2250.09	1131.02	3038.30	100.76	4312.36	1949.70	980.03	3690.40
35.8	31.6	15	0.35	0.70	0.40	22.00	5.47	241.3	61.25	3512.63	2251.92	1131.94	3051.38	101.00	4337.74	1954.36	982.37	3711.47
35.9	31.7	15	0.35	0.70	0.40	22.00	5.47	242.0	61.25	3528.02	2253.75	1132.86	3064.46	101.24	4363.19	1959.03	984.71	3732.59
36.0	31.8	15	0.35	0.70	0.40	22.00	5.47	242.8	61.25	3543.42	2255.59	1133.78	3077.54	101.48	4388.69	1963.69	987.06	3753.76
36.1	31.9	15	0.35	0.70	0.40	22.00	5.47	243.6	61.25	3558.81	2257.42	1134.70	3090.61	101.72	4414.26	1968.35	989.40	3774.97
36.2	32.0	15	0.35	0.70	0.40	22.00	5.47	244.3	61.25	3574.20	2259.25	1135.62	3103.69	101.96	4439.88	1973.01	991.75	3796.24
36.3	32.1	15	0.35	0.70	0.40	22.00	5.47	245.1	61.25	3589.60	2261.08	1136.55	3116.77	102.20	4465.57	1977.68	994.09	3817.55
36.4	32.2	15	0.35	0.70	0.40	22.00	5.47	245.9	61.25	3604.99	2262.92	1137.47	3129.85	102.44	4491.32	1982.34	996.43	3838.91
36.5	32.3	15	0.35	0.70	0.40	22.00	5.47	246.6	61.25	3620.38	2264.75	1138.39	3142.93	102.69	4517.12	1987.00	998.78	3860.32
36.6	32.4	15	0.35	0.70	0.40	22.00	5.47	247.4	61.25	3635.78	2266.58	1139.31	3156.01	102.93	4542.99	1991.67	1001.12	3881.78
36.7	32.5	15	0.35	0.70	0.40	22.00	5.47	248.1	61.25	3651.17	2268.42	1140.23	3169.09	103.17	4568.92	1996.33	1003.46	3903.29
36.8	32.6	15	0.35	0.70	0.40	22.00	5.47	248.9	61.25	3666.57	2270.25	1141.15	3182.16	103.41	4594.91	2000.99	1005.81	3924.84
36.9	32.7	15	0.35	0.70	0.40	22.00	5.47	249.7	61.25	3681.96	2272.08	1142.07	3195.24	103.65	4620.96	2005.65	1008.15	3946.44
37.0	32.8	15	0.35	0.70	0.40	22.00	5.47	250.4	61.25	3697.35	2273.92	1142.99	3208.32	103.89	4647.07	2010.32	1010.50	3968.10
37.1	32.9	15	0.35	0.70	0.40	22.00	5.47	251.2	61.25	3712.75	2275.75	1143.92	3221.40	104.13	4673.24	2014.98	1012.84	3989.80
37.2	33.0	15	0.35	0.70	0.40	22.00	5.47	252.0	61.25	3728.14	2277.58	1144.84	3234.48	104.37	4699.47	2019.64	1015.18	4011.54
37.3	33.1	15	0.35	0.70	0.40	22.00	5.47	252.7	61.25	3743.53	2279.41	1145.76	3247.56	104.61	4725.77	2024.30	1017.53	4033.34

37.4	33.2	15	0.35	0.70	0.40	22.00	5.47	253.5	61.25	3758.93	2281.25	1146.68	3260.64	104.85	4752.12	2028.97	1019.87	4055.19
37.5	33.3	15	0.35	0.70	0.40	22.00	5.47	254.3	61.25	3774.32	2283.08	1147.60	3273.71	105.09	4778.53	2033.63	1022.21	4077.08
37.6	33.4	15	0.35	0.70	0.40	22.00	5.47	255.0	61.25	3789.72	2284.91	1148.52	3286.79	105.34	4805.01	2038.29	1024.56	4099.02
37.7	33.5	15	0.35	0.70	0.40	22.00	5.47	255.8	61.25	3805.11	2286.75	1149.44	3299.87	105.58	4831.54	2042.95	1026.90	4121.02
37.8	33.6	15	0.35	0.70	0.40	22.00	5.47	256.5	61.25	3820.50	2288.58	1150.37	3312.95	105.82	4858.13	2047.62	1029.24	4143.05
37.9	33.7	15	0.35	0.70	0.40	22.00	5.47	257.3	61.25	3835.90	2290.41	1151.29	3326.03	106.06	4884.79	2052.28	1031.59	4165.14
38.0	33.8	15	0.35	0.70	0.40	22.00	5.47	258.1	61.25	3851.29	2292.25	1152.21	3339.11	106.30	4911.51	2056.94	1033.93	4187.28
38.1	33.9	15	0.35	0.70	0.40	22.00	5.47	258.8	61.25	3866.69	2294.08	1153.13	3352.19	106.54	4938.28	2061.61	1036.28	4209.46
38.2	34.0	15	0.35	0.70	0.40	22.00	5.47	259.6	61.25	3882.08	2295.91	1154.05	3365.26	106.78	4965.12	2066.27	1038.62	4231.70
38.3	34.1	15	0.35	0.70	0.40	22.00	5.47	260.4	61.25	3897.47	2297.74	1154.97	3378.34	107.02	4992.02	2070.93	1040.96	4253.98
38.4	34.2	15	0.35	0.70	0.40	22.00	5.47	261.1	61.25	3912.87	2299.58	1155.89	3391.42	107.26	5018.98	2075.59	1043.31	4276.31
38.5	34.3	15	0.35	0.70	0.40	22.00	5.47	261.9	61.25	3928.26	2301.41	1156.82	3404.50	107.50	5045.99	2080.26	1045.65	4298.69
38.6	34.4	15	0.35	0.70	0.40	22.00	5.47	262.7	61.25	3943.65	2303.24	1157.74	3417.58	107.75	5073.07	2084.92	1047.99	4321.11
38.7	34.5	15	0.35	0.70	0.40	22.00	5.47	263.4	61.25	3959.05	2305.08	1158.66	3430.66	107.99	5100.21	2089.58	1050.34	4343.59
38.8	34.6	15	0.35	0.70	0.40	22.00	5.47	264.2	61.25	3974.44	2306.91	1159.58	3443.74	108.23	5127.41	2094.24	1052.68	4366.11
38.9	34.7	15	0.35	0.70	0.40	22.00	5.47	264.9	61.25	3989.84	2308.74	1160.50	3456.81	108.47	5154.68	2098.91	1055.03	4388.69
39.0	34.8	15	0.35	0.70	0.40	22.00	5.47	265.7	61.25	4005.23	2310.58	1161.42	3469.89	108.71	5182.00	2103.57	1057.37	4411.31
39.1	34.9	15	0.35	0.70	0.40	22.00	5.47	266.5	61.25	4020.62	2312.41	1162.34	3482.97	108.95	5209.38	2108.23	1059.71	4433.98
39.2	35.0	15	0.35	0.70	0.40	22.00	5.47	267.2	61.25	4036.02	2314.24	1163.26	3496.05	109.19	5236.82	2112.90	1062.06	4456.69
39.3	35.1	15	0.35	0.70	0.40	22.00	5.47	268.0	61.25	4051.41	2316.07	1164.19	3509.13	109.43	5264.32	2117.56	1064.40	4479.46
39.4	35.2	15	0.35	0.70	0.40	22.00	5.47	268.8	61.25	4066.80	2317.91	1165.11	3522.21	109.67	5291.89	2122.22	1066.74	4502.27
39.5	35.3	15	0.35	0.70	0.40	22.00	5.47	269.5	61.25	4082.20	2319.74	1166.03	3535.29	109.91	5319.51	2126.88	1069.09	4525.14
39.6	35.4	15	0.35	0.70	0.40	22.00	5.47	270.3	61.25	4097.59	2321.57	1166.95	3548.36	110.15	5347.20	2131.55	1071.43	4548.05
39.7	35.5	15	0.35	0.70	0.40	22.00	5.47	271.1	61.25	4112.99	2323.41	1167.87	3561.44	110.40	5374.94	2136.21	1073.78	4571.01
39.8	35.6	15	0.35	0.70	0.40	22.00	5.47	271.8	61.25	4128.38	2325.24	1168.79	3574.52	110.64	5402.75	2140.87	1076.12	4594.02
39.9	35.7	15	0.35	0.70	0.40	22.00	5.47	272.6	61.25	4143.77	2327.07	1169.71	3587.60	110.88	5430.62	2145.53	1078.46	4617.07
40.0	35.8	15	0.35	0.70	0.40	22.00	5.47	273.3	61.25	4159.17	2328.91	1170.64	3600.68	111.12	5458.54	2150.20	1080.81	4640.18
40.1	35.9	15	0.35	0.70	0.40	22.00	5.47	274.1	61.25	4174.56	2330.74	1171.56	3613.76	111.36	5486.53	2154.86	1083.15	4663.33
40.2	36.0	15	0.35	0.70	0.40	22.00	5.47	274.9	61.25	4189.96	2332.57	1172.48	3626.84	111.60	5514.58	2159.52	1085.49	4686.54
40.3	36.1	15	0.35	0.70	0.40	22.00	5.47	275.6	61.25	4205.35	2334.40	1173.40	3639.91	111.84	5542.69	2164.19	1087.84	4709.79
40.4	36.2	15	0.35	0.70	0.40	22.00	5.47	276.4	61.25	4220.74	2336.24	1174.32	3652.99	112.08	5570.86	2168.85	1090.18	4733.09
40.5	36.3	15	0.35	0.70	0.40	22.00	5.47	277.2	61.25	4236.14	2338.07	1175.24	3666.07	112.32	5599.09	2173.51	1092.53	4756.43
40.6	36.4	15	0.35	0.70	0.40	22.00	5.47	277.9	61.25	4251.53	2339.90	1176.16	3679.15	112.56	5627.38	2178.17	1094.87	4779.83
40.7	36.5	15	0.35	0.70	0.40	22.00	5.47	278.7	61.25	4266.92	2341.74	1177.09	3692.23	112.81	5655.73	2182.84	1097.21	4803.27
40.8	36.6	15	0.35	0.70	0.40	22.00	5.47	279.5	61.25	4282.32	2343.57	1178.01	3705.31	113.05	5684.14	2187.50	1099.56	4826.77
40.9	36.7	15	0.35	0.70	0.40	22.00	5.47	280.2	61.25	4297.71	2345.40	1178.93	3718.39	113.29	5712.61	2192.16	1101.90	4850.31
41.0	36.8	15	0.35	0.70	0.40	22.00	5.47	281.0	61.25	4313.11	2347.24	1179.85	3731.46	113.53	5741.15	2196.82	1104.24	4873.90
41.1	36.9	15	0.35	0.70	0.40	22.00	5.47	281.7	61.25	4328.50	2349.07	1180.77	3744.54	113.77	5769.74	2201.49	1106.59	4897.54
41.2	37.0	15	0.35	0.70	0.40	22.00	5.47	282.5	61.25	4343.89	2350.90	1181.69	3757.62	114.01	5798.39	2206.15	1108.93	4921.22
41.3	37.1	15	0.35	0.70	0.40	22.00	5.47	283.3	61.25	4359.29	2352.73	1182.61	3770.70	114.25	5827.11	2210.81	1111.28	4944.96
41.4	37.2	15	0.35	0.70	0.40	22.00	5.47	284.0	61.25	4374.68	2354.57	1183.53	3783.78	114.49	5855.88	2215.48	1113.62	4968.74
41.5	37.3	15	0.35	0.70	0.40	22.00	5.47	284.8	61.25	4390.07	2356.40	1184.46	3796.86	114.73	5884.72	2220.14	1115.96	4992.57
41.6	37.4	15	0.35	0.70	0.40	22.00	5.47	285.6	61.25	4405.47	2358.23	1185.38	3809.94	114.97	5913.61	2224.80	1118.31	5016.45
41.7	37.5	15	0.35	0.70	0.40	22.00	5.47	286.3	61.25	4420.86	2360.07	1186.30	3823.01	115.22	5942.57	2229.46	1120.65	5040.38
41.8	37.6	15	0.35	0.70	0.40	22.00	5.47	287.1	61.25	4436.26	2361.90	1187.22	3836.09	115.46	5971.59	2234.13	1122.99	5064.36
41.9	37.7	15	0.35	0.70	0.40	22.00	5.47	287.9	61.25	4451.65	2363.73	1188.14	3849.17	115.70	6000.67	2238.79	1125.34	5088.38
42.0	37.8	15	0.35	0.70	0.40	22.00	5.47	288.6	61.25	4467.04	2365.57	1189.06	3862.25	115.94	6029.80	2243.45	1127.68	5112.46

42.1	37.9	15	0.35	0.70	0.40	22.00	5.47	289.4	61.25	4482.44	2367.40	1189.98	3875.33	116.18	6059.00	2248.11	1130.03	5136.58
42.2	38.0	15	0.35	0.70	0.40	22.00	5.47	290.1	61.25	4497.83	2369.23	1190.91	3888.41	116.42	6088.26	2252.78	1132.37	5160.75
42.3	38.1	15	0.35	0.70	0.40	22.00	5.47	290.9	61.25	4513.23	2371.06	1191.83	3901.49	116.66	6117.58	2257.44	1134.71	5184.97
42.4	38.2	15	0.35	0.70	0.40	22.00	5.47	291.7	61.25	4528.62	2372.90	1192.75	3914.56	116.90	6146.96	2262.10	1137.06	5209.24
42.5	38.3	15	0.35	0.70	0.40	22.00	5.47	292.4	61.25	4544.01	2374.73	1193.67	3927.64	117.14	6176.41	2266.76	1139.40	5233.56
42.6	38.4	15	0.35	0.70	0.40	22.00	5.47	293.2	61.25	4559.41	2376.56	1194.59	3940.72	117.38	6205.91	2271.43	1141.74	5257.92
42.7	38.5	15	0.35	0.70	0.40	22.00	5.47	294.0	61.25	4574.80	2378.40	1195.51	3953.80	117.62	6235.47	2276.09	1144.09	5282.34
42.8	38.6	15	0.35	0.70	0.40	22.00	5.47	294.7	61.25	4590.19	2380.23	1196.43	3966.88	117.87	6265.09	2280.75	1146.43	5306.80
42.9	38.7	15	0.35	0.70	0.40	22.00	5.47	295.5	61.25	4605.59	2382.06	1197.36	3979.96	118.11	6294.78	2285.42	1148.78	5331.31
43.0	38.8	15	0.35	0.70	0.40	22.00	5.47	296.3	61.25	4620.98	2383.90	1198.28	3993.04	118.35	6324.52	2290.08	1151.12	5355.87
43.1	38.9	15	0.35	0.70	0.40	22.00	5.47	297.0	61.25	4636.38	2385.73	1199.20	4006.11	118.59	6354.32	2294.74	1153.46	5380.47
43.2	39.0	15	0.35	0.70	0.40	22.00	5.47	297.8	61.25	4651.77	2387.56	1200.12	4019.19	118.83	6384.19	2299.40	1155.81	5405.13
43.3	39.1	15	0.35	0.70	0.40	22.00	5.47	298.5	61.25	4667.16	2389.39	1201.04	4032.27	119.07	6414.11	2304.07	1158.15	5429.83
43.4	39.2	15	0.35	0.70	0.40	22.00	5.47	299.3	61.25	4682.56	2391.23	1201.96	4045.35	119.31	6444.10	2308.73	1160.49	5454.59
43.5	39.3	15	0.35	0.70	0.40	22.00	5.47	300.1	61.25	4697.95	2393.06	1202.88	4058.43	119.55	6474.15	2313.39	1162.84	5479.39
43.6	39.4	15	0.35	0.70	0.40	22.00	5.47	300.8	61.25	4713.34	2394.89	1203.81	4071.51	119.79	6504.26	2318.05	1165.18	5504.24
43.7	39.5	15	0.35	0.70	0.40	22.00	5.47	301.6	61.25	4728.74	2396.73	1204.73	4084.59	120.03	6534.42	2322.72	1167.53	5529.13
43.8	39.6	15	0.35	0.70	0.40	22.00	5.47	302.4	61.25	4744.13	2398.56	1205.65	4097.66	120.28	6564.65	2327.38	1169.87	5554.08
43.9	39.7	15	0.35	0.70	0.40	22.00	5.47	303.1	61.25	4759.53	2400.39	1206.57	4110.74	120.52	6594.94	2332.04	1172.21	5579.08
44.0	39.8	15	0.35	0.70	0.40	22.00	5.47	303.9	61.25	4774.92	2402.23	1207.49	4123.82	120.76	6625.29	2336.71	1174.56	5604.12
44.1	39.9	15	0.35	0.70	0.40	22.00	5.47	304.6	61.25	4790.31	2404.06	1208.41	4136.90	121.00	6655.70	2341.37	1176.90	5629.21
44.2	40.0	15	0.35	0.70	0.40	22.00	5.47	305.4	61.25	4805.71	2405.89	1209.33	4149.98	121.24	6686.17	2346.03	1179.24	5654.35
44.3	40.1	15	0.35	0.70	0.40	22.00	5.47	306.2	61.25	4821.10	2407.72	1210.25	4163.06	121.48	6716.70	2350.69	1181.59	5679.54
44.4	40.2	15	0.35	0.70	0.40	22.00	5.47	306.9	61.25	4836.49	2409.56	1211.18	4176.14	121.72	6747.29	2355.36	1183.93	5704.78
44.5	40.3	15	0.35	0.70	0.40	22.00	5.47	307.7	61.25	4851.89	2411.39	1212.10	4189.21	121.96	6777.95	2360.02	1186.27	5730.06
44.6	40.4	15	0.35	0.70	0.40	22.00	5.47	308.5	61.25	4867.28	2413.22	1213.02	4202.29	122.20	6808.66	2364.68	1188.62	5755.39
44.7	40.5	15	0.35	0.70	0.40	22.00	5.47	309.2	61.25	4882.68	2415.06	1213.94	4215.37	122.44	6839.43	2369.34	1190.96	5780.78
44.8	40.6	15	0.35	0.70	0.40	22.00	5.47	310.0	61.25	4898.07	2416.89	1214.86	4228.45	122.68	6870.27	2374.01	1193.31	5806.21
44.9	40.7	15	0.35	0.70	0.40	22.00	5.47	310.8	61.25	4913.46	2418.72	1215.78	4241.53	122.93	6901.16	2378.67	1195.65	5831.69
45.0	40.8	15	0.35	0.70	0.40	22.00	5.47	311.5	61.25	4928.86	2420.56	1216.70	4254.61	123.17	6932.12	2383.33	1197.99	5857.22
45.1	40.9	15	0.35	0.70	0.40	22.00	5.47	312.3	61.25	4944.25	2422.39	1217.63	4267.69	123.41	6963.13	2388.00	1200.34	5882.79
45.2	41.0	15	0.35	0.70	0.40	22.00	5.47	313.0	61.25	4959.65	2424.22	1218.55	4280.76	123.65	6994.21	2392.66	1202.68	5908.42
45.3	41.1	15	0.35	0.70	0.40	22.00	5.47	313.8	61.25	4975.04	2426.05	1219.47	4293.84	123.89	7025.35	2397.32	1205.02	5934.09
45.4	41.2	15	0.35	0.70	0.40	22.00	5.47	314.6	61.25	4990.43	2427.89	1220.39	4306.92	124.13	7056.54	2401.98	1207.37	5959.81
45.5	41.3	15	0.35	0.70	0.40	22.00	5.47	315.3	61.25	5005.83	2429.72	1221.31	4320.00	124.37	7087.80	2406.65	1209.71	5985.58
45.6	41.4	15	0.35	0.70	0.40	22.00	5.47	316.1	61.25	5021.22	2431.55	1222.23	4333.08	124.61	7119.12	2411.31	1212.06	6011.40
45.7	41.5	15	0.35	0.70	0.40	22.00	5.47	316.9	61.25	5036.61	2433.39	1223.15	4346.16	124.85	7150.50	2415.97	1214.40	6037.27
45.8	41.6	15	0.35	0.70	0.40	22.00	5.47	317.6	61.25	5052.01	2435.22	1224.08	4359.24	125.09	7181.94	2420.63	1216.74	6063.18
45.9	41.7	15	0.35	0.70	0.40	22.00	5.47	318.4	61.25	5067.40	2437.05	1225.00	4372.31	125.34	7213.44	2425.30	1219.09	6089.14
46.0	41.8	15	0.35	0.70	0.40	22.00	5.47	319.2	61.25	5082.80	2438.89	1225.92	4385.39	125.58	7245.00	2429.96	1221.43	6115.16
46.1	41.9	15	0.35	0.70	0.40	22.00	5.47	319.9	61.25	5098.19	2440.72	1226.84	4398.47	125.82	7276.62	2434.62	1223.77	6141.22
46.2	42.0	15	0.35	0.70	0.40	22.00	5.47	320.7	61.25	5113.58	2442.55	1227.76	4411.55	126.06	7308.30	2439.28	1226.12	6167.33
46.3	42.1	15	0.35	0.70	0.40	22.00	5.47	321.4	61.25	5128.98	2444.38	1228.68	4424.63	126.30	7340.05	2443.95	1228.46	6193.48
46.4	42.2	15	0.35	0.70	0.40	22.00	5.47	322.2	61.25	5144.37	2446.22	1229.60	4437.71	126.54	7371.85	2448.61	1230.81	6219.69
46.5	42.3	15	0.35	0.70	0.40	22.00	5.47	323.0	61.25	5159.76	2448.05	1230.52	4450.79	126.78	7403.71	2453.27	1233.15	6245.94
46.6	42.4	15	0.35	0.70	0.40	22.00	5.47	323.7	61.25	5175.16	2449.88	1231.45	4463.86	127.02	7435.64	2457.94	1235.49	6272.25
46.7	42.5	15	0.35	0.70	0.40	22.00	5.47	324.5	61.25	5190.55	2451.72	1232.37	4476.94	127.26	7467.62	2462.60	1237.84	6298.60

46.8	42.6	15	0.35	0.70	0.40	22.00	5.47	325.3	61.25	5205.95	2453.55	1233.29	4490.02	127.50	7499.67	2467.26	1240.18	6325.00
46.9	42.7	15	0.35	0.70	0.40	22.00	5.47	326.0	61.25	5221.34	2455.38	1234.21	4503.10	127.75	7531.77	2471.92	1242.52	6351.45
47.0	42.8	15	0.35	0.70	0.40	22.00	5.47	326.8	61.25	5236.73	2457.22	1235.13	4516.18	127.99	7563.94	2476.59	1244.87	6377.94
47.1	42.9	15	0.35	0.70	0.40	22.00	5.47	327.6	61.25	5252.13	2459.05	1236.05	4529.26	128.23	7596.17	2481.25	1247.21	6404.49
47.2	43.0	15	0.35	0.70	0.40	22.00	5.47	328.3	61.25	5267.52	2460.88	1236.97	4542.34	128.47	7628.45	2485.91	1249.56	6431.08
47.3	43.1	15	0.35	0.70	0.40	22.00	5.47	329.1	61.25	5282.92	2462.71	1237.90	4555.41	128.71	7660.80	2490.57	1251.90	6457.72
47.4	43.2	15	0.35	0.70	0.40	22.00	5.47	329.8	61.25	5298.31	2464.55	1238.82	4568.49	128.95	7693.21	2495.24	1254.24	6484.41
47.5	43.3	15	0.35	0.70	0.40	22.00	5.47	330.6	61.25	5313.70	2466.38	1239.74	4581.57	129.19	7725.68	2499.90	1256.59	6511.15
47.6	43.4	15	0.35	0.70	0.40	22.00	5.47	331.4	61.25	5329.10	2468.21	1240.66	4594.65	129.43	7758.21	2504.56	1258.93	6537.94
47.7	43.5	15	0.35	0.70	0.40	22.00	5.47	332.1	61.25	5344.49	2470.05	1241.58	4607.73	129.67	7790.80	2509.23	1261.27	6564.78
47.8	43.6	15	0.35	0.70	0.40	22.00	5.47	332.9	61.25	5359.88	2471.88	1242.50	4620.81	129.91	7823.45	2513.89	1263.62	6591.66
47.9	43.7	15	0.35	0.70	0.40	22.00	5.47	333.7	61.25	5375.28	2473.71	1243.42	4633.89	130.15	7856.16	2518.55	1265.96	6618.59
48.0	43.8	15	0.35	0.70	0.40	22.00	5.47	334.4	61.25	5390.67	2475.55	1244.35	4646.96	130.40	7888.93	2523.21	1268.31	6645.57
48.1	43.9	15	0.35	0.70	0.40	22.00	5.47	335.2	61.25	5406.07	2477.38	1245.27	4660.04	130.64	7921.77	2527.88	1270.65	6672.60
48.2	44.0	15	0.35	0.70	0.40	22.00	5.47	336.0	61.25	5421.46	2479.21	1246.19	4673.12	130.88	7954.66	2532.54	1272.99	6699.68
48.3	44.1	15	0.35	0.70	0.40	22.00	5.47	336.7	61.25	5436.85	2481.04	1247.11	4686.20	131.12	7987.61	2537.20	1275.34	6726.81
48.4	44.2	15	0.35	0.70	0.40	22.00	5.47	337.5	61.25	5452.25	2482.88	1248.03	4699.28	131.36	8020.63	2541.86	1277.68	6753.98
48.5	44.3	15	0.35	0.70	0.40	22.00	5.47	338.2	61.25	5467.64	2484.71	1248.95	4712.36	131.60	8053.70	2546.53	1280.02	6781.21
48.6	44.4	15	0.35	0.70	0.40	22.00	5.47	339.0	61.25	5483.03	2486.54	1249.87	4725.44	131.84	8086.84	2551.19	1282.37	6808.48
48.7	44.5	15	0.35	0.70	0.40	22.00	5.47	339.8	61.25	5498.43	2488.38	1250.79	4738.51	132.08	8120.03	2555.85	1284.71	6835.80
48.8	44.6	15	0.35	0.70	0.40	22.00	5.47	340.5	61.25	5513.82	2490.21	1251.72	4751.59	132.32	8153.29	2560.52	1287.06	6863.17
48.9	44.7	15	0.35	0.70	0.40	22.00	5.47	341.3	61.25	5529.22	2492.04	1252.64	4764.67	132.56	8186.61	2565.18	1289.40	6890.58
49.0	44.8	15	0.35	0.70	0.40	22.00	5.47	342.1	61.25	5544.61	2493.88	1253.56	4777.75	132.81	8219.98	2569.84	1291.74	6918.05
49.1	44.9	15	0.35	0.70	0.40	22.00	5.47	342.8	61.25	5560.00	2495.71	1254.48	4790.83	133.05	8253.42	2574.50	1294.09	6945.56
49.2	45.0	15	0.35	0.70	0.40	22.00	5.47	343.6	61.25	5575.40	2497.54	1255.40	4803.91	133.29	8286.92	2579.17	1296.43	6973.13
49.3	45.1	15	0.35	0.70	0.40	22.00	5.47	344.4	61.25	5590.79	2499.37	1256.32	4816.99	133.53	8320.48	2583.83	1298.77	7000.74
49.4	45.2	15	0.35	0.70	0.40	22.00	5.47	345.1	61.25	5606.19	2501.21	1257.24	4830.06	133.77	8354.10	2588.49	1301.12	7028.40
49.5	45.3	15	0.35	0.70	0.40	22.00	5.47	345.9	61.25	5621.58	2503.04	1258.17	4843.14	134.01	8387.78	2593.15	1303.46	7056.11
49.6	45.4	15	0.35	0.70	0.40	22.00	5.47	346.6	61.25	5636.97	2504.87	1259.09	4856.22	134.25	8421.52	2597.82	1305.81	7083.86
49.7	45.5	15	0.35	0.70	0.40	22.00	5.47	347.4	61.25	5652.37	2506.71	1260.01	4869.30	134.49	8455.32	2602.48	1308.15	7111.67
49.8	45.6	15	0.35	0.70	0.40	22.00	5.47	348.2	61.25	5667.76	2508.54	1260.93	4882.38	134.73	8489.19	2607.14	1310.49	7139.52
49.9	45.7	15	0.35	0.70	0.40	22.00	5.47	348.9	61.25	5683.15	2510.37	1261.85	4895.46	134.97	8523.11	2611.81	1312.84	7167.42
50.0	45.8	15	0.35	0.70	0.40	22.00	5.47	349.7	61.25	5698.55	2512.21	1262.77	4908.54	135.21	8557.09	2616.47	1315.18	7195.37

4 Tabelle riepilogative delle resistenze dei pali

Di seguito, in si riportano i valori delle resistenze di progetto dei pali rispettivamente nella condizione sismica, statica di breve termine e statica di lungo termine.

Tabella 4-1 Valori di progetto della resistenza dei pali in condizione sismica.

Condizione sismica

Φ (mm)	L (m)	Q_{lim}↓ (kN)	Q_{lim}↑ (kN)	A_{long}	H_{lim}↔ (kN)
800	15	1437	666	10 Φ 20	99
				20 Φ 24	200
				22 Φ 30	283
1000	15	2008	877	16 Φ 20	200
				22 Φ 26	338
				30 Φ 30	483
1200	15	2675	1106	16 Φ 24	345
				26 Φ 26	505
				38 Φ 30	731

Tabella 4-2 Valori di progetto della resistenza dei pali in condizione statica di breve termine.

Condizione statica di breve termine

Φ (mm)	L (m)	Q_{lim}↓ (kN)	Q_{lim}↑ (kN)	A_{long}	H_{lim}↔ (kN)
800	15	2417	868	10 Φ 20	269
				20 Φ 24	460
				22 Φ 30	589
1000	15	3573	1125	16 Φ 20	467
				22 Φ 26	698
				30 Φ 30	912
1200	15	4972	1398	16 Φ 24	722
				26 Φ 26	967
				38 Φ 30	1285

Tabella 4-3 Valori di progetto della resistenza dei pali in condizione statica di lungo termine.

Condizione statica di lungo termine

Φ (mm)	L (m)	Q_{lim}↓ (kN)	Q_{lim}↑ (kN)	A_{long}	H_{lim}↔ (kN)
800	15	2368	823	10 Φ 20	256
				20 Φ 24	434
				22 Φ 30	559
1000	15	3512	1069	16 Φ 20	450
				22 Φ 26	672
				30 Φ 30	884
1200	15	4898	1330	16 Φ 24	714
				26 Φ 26	956
				38 Φ 30	1273